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EDWARDS'S

BOTANICAL REGISTER:

OR,

ORNAMENTAL FLOWER-GARDEN AND SHRUBBERY:

CONSISTING OF

COLOURED FIGURES OF PLANTS AND SHRUBS,

CULTIVATED IN BRITISH GARDENS;

ACCOMPANIED BY THEIR

History, Best Method of Treatment in Cultivation, Propagation, &c.

EDITED

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COMPLETE IN TEN VOLUMES.

VOL. VIII.

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MDCCCXLV.

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Mitt. Drake del
Pub.d by
J. Ridgway
169 Piccadilly Jan.y 1.1845
G. Barclay sc

LILIUM Thomsoniānum.

Dr. Thomson's Lily.

HEXANDRIA *MONOGYNIA.*

Nat. ord. LILIACEÆ.

LILIUM. Linn.

L. *Thomsonianum;* foliis alternis linearibus acuminatis mollibus, floribus racemosis horizontalibus campanulatis, sepalis petalisque obovato-lanceolatis conformibus intùs glaberrimis apice recurvis ad basin usque distinctis basi maculatis, staminibus declinatis sepalorum longitudine, stigmate trilobo, "capsulis turbinatis obtusè hexagonis."
Lilium roseum, *β. Wall. Cat. no.* 5077. *fide Roylii.*
Fritillaria Thomsoniana, *Royle Illustrations, p.*388. *t.* 92. *Kunth enumeratio,* 4. 672.

For the opportunity of figuring this beautiful plant we are indebted to Messrs. Loddiges, with whom it opened its sweet-scented flowers in a greenhouse in April, 1844. It is a native of Mussooree, one of the northern provinces of British India.

It was first seen by the people employed by Dr. Wallich, who regarded it as a Lily. Professor Royle afterwards referred it to Fritillaria; but its floral leaves have not the honey-pore which is essential to that genus. In fact it is far too near in structure to the common white Lily, to allow of its being distinguished generically. Its delicate rose-coloured flowers offer however a very marked feature of distinction.

The specimen from which the figure was taken had been grown in a pot, and was by no means in good health. It would doubtless become much larger if treated with the care that is bestowed on the Japan Lilies. Indeed Dr. Royle represents the flowers as being fully twice as large. Fig. 1. represents the base of one of the floral leaves, to show that there is no trace of a honey-pore.

It is a very handsome half-hardy bulb, requiring the same kind of treatment and soil as Tigridias.

January, 1845.

It flowers in May, and is increased by dividing the bulbs or by seeds. The seeds should be sown when ripe, in pans filled with light sandy loam and leaf-mould, and placed in a cold pit or frame, and kept rather dry at first; afterwards they should be rather freely supplied during the growing season. The young plants should not be removed from the seed pan before the second season, and then in a growing state.

Seedling plants grow slowly, and take some years before they bloom. It has thus been raised in the Garden of the Horticultural Society, but it has not yet flowered.

Mrs Lindley del. Pub.d by J. Ridgway 169 Piccadilly Jan.y 1 1845 J. Barclay sc.

ERIA vestita.

Furred Eria.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § MALAXEÆ=DENDROBIDÆ.

ERIA. Lindl.

E. *vestita* (Lindl. in Bot. Reg. 1844. misc. 79. *Dendrobium vestitum*, Wall. Cat. no. 2005. Lindl. gen. & sp. no. 33); caulibus pendulis villis deciduis densè vestitis, foliis coriaceis lanceolatis apice obliquis obtusis integris suprà sparsè subtùs densissimè villosis, racemis elongatis multifloris flexuosis bracteis ovatis coriaceis persistentibus floribus capsulisque villosis, sepalis lanceolatis lateralibus in cornu obtuso porrecto connatis mucronulatis, petalis conformibus obtusis brevioribus glabris, labelli trilobi laciniis lateralibus obtusis intermediâ subrotundâ crispâ emarginatâ pilsoâ per axin lineâ elevatâ interruptâ velutinâ dentibusque paucis auctâ, lamellis 7 quarum duæ lanceolatæ sinus fere attingentes et quinque parvæ dentiformes.

Of the shaggy Erias this is one of the more remarkable, having so much the habit of a Dendrobium that it was so considered by Dr. Wallich; for at the time of the publication of that indefatigable Botanist's laborious Catalogue, it was not known that all the species of Dendrobium are hairless or nearly so.

What is not a little singular is that these plants have very frequently tawny or reddish-brown hairs, if they have any. The history of the production of such a colour would be a good subject for examination by some phyto-chemist. The flowers too are reddish-brown externally, white inside, and hang down in pendulous spikes, which are longer than the leaves.

The species is a native of the Indian Archipelago. Dr. Wallich's collectors had it from Sincapore, and Mr. Cuming sent it from Manilla(?) to Messrs. Loddiges. It also occurs, in a small flowered state, among Mr. Cuming's dried plants from the Philippines, marked "Laguna." The specimen

before me has a Jungermannia clinging to its flower-spike, shewing that it must have come from some damp and shady station.

It should be potted in turfy heath-mould mixed with potsherds. In summer it should receive an ample supply of water, while the atmosphere should be kept as moist as possible. In sunny weather it should be shaded to keep the temperature about 80° by day, without giving much air. The temperature at night, during the growing season, may be from 68° or 70°. In winter, little water will be required, provided the house can be filled with steam once a day. At this period the temperature requires to be kept up to about 65° with fire heat.

3
2

GLOXINIA tubiflōra.

Tube-flowered Gloxinia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. GESNERACEÆ.

GLOXINIA. Supra, vol. 3. *fol.* 213.

G. *tubiflora ;* caulescens, pubescens, foliis oblongis subacuminatis brevi-petiolatis subcrenatis, paniculâ terminali, pedicellis elongatis, corolla subhypocrateriformi, tubo elongato sursum curvato, limbo patente, lobis 5 subæqualibus, glandulis ad basin ovarii 4 unicâ duplò majore. *Hooker in Bot. Mag. t.* 3971.

This beautiful thing was raised in the Glasnevin garden, from seeds received from Mr. Tweedie of Buenos Ayres. Sir W. Hooker, however, suggests that it is really a native either of South Brazil or Paraguay. It is a charming greenhouse plant ; its lovely snow-white flowers being very agreeably fragrant.

What constitutes a Gesnera?—what a Gloxinia?—what an Achimenes? According to the views of Martius and De Candolle, their differences are these :—

GESNERA.—Calyx somewhat unequal. Corolla tubular, with five protuberances at its base, or an equal swelling all round. Anthers joined together when young. From two to five glands round the ovary.

GLOXINIA.—Calyx equal. Corolla funnel-shaped or somewhat bell-shaped, inflated in the middle, protuberant on one side only of the base. Anthers joined together. Five glands round the ovary.

ACHIMENES.—Calyx equal. Corolla between tubular and funnel-shaped, protuberant on one side only of the base. Anthers separate. A ring round the ovary.

Such being the case, the plant before us cannot be a Gesnera, because its corolla is only protuberant on one side, and

because its anthers hold together when old; it cannot be an Achimenes because its anthers are joined together, and it has not a ring round the ovary; therefore it would appear that it *must* be a Gloxinia. And so Sir W. Hooker has considered it, observing however that it "seems to have nearly as strong a claim to be considered a Gesnera as a Gloxinia, or rather it appears almost to unite the two genera."

It is however so unlike the Gloxinias of our gardens (with the exception of G. hirsuta) or indeed the Brazilian G. gracilis, which more resembles it, that it can hardly be regarded as a genuine species of the former genus, to which its naked inflorescence is much opposed. The Gesneras themselves however, as well as the genus Achimenes, require great revision, and it will be as well to leave the present name of the plant undisturbed, until some Botanist shall re-examine the whole mass of species collected under the names Gesnera, Achimenes, and Gloxinia.

The accompanying drawing was made in the garden of the Earl of Auckland in May, 1844. Fig. 1. represents a young anther; 2. the ovary, style and stigma, with the surrounding glands.

It is a stove plant, and may be treated in the same manner as other species of the genus now in cultivation. It requires a season of growth, and another of rest; in the latter it must be kept dry. The soil which appears to be best adapted for it is rough heath-mould mixed with one-third silver sand. In order to flower the plant, in due season it should be re-potted and started to grow about the beginning of February. Owing to this species producing a large quantity of under-ground stems, it should be grown in a large pot, in which, if it is well drained, an ample supply of water may be given during the summer season. It may be abundantly multiplied either from the under-ground stems or from cuttings.

EPIDENDRUM dipus.

Two-footed Epidendrum.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § EPIDENDREÆ—LÆLIADÆ. *Natural System of Botany, ed.* 3. (ined.)

EPIDENDRUM. Linn.

§. Spathium. *Bot. Reg.* 1844. misc. 82.

E. *dipus ;* foliis longis flaccidis distichis subacuminatis, paniculâ nutante densâ multiflorâ e spathis 2 herbaceis erumpente, sepalis oblongo-lanceolatis petalisque linearibus obtusis patentibus, labelli trilobi lobis lateralibus semicircularibus planis intermedio bilobo laciniis linearibus recurvis dente minuto nunc interjecto ; basi bicallosi venis 2 elevatis.

One of those innumerable species inhabiting South American forests, to the enumeration of which there seems no end. It was imported by Messrs. Loddiges, from Brazil, and produced its densely clustered panicles of sweet-scented green, brown and white flowers in January.

In many respects it approaches E. nutans, but its pan·-le is very much more compact, its colour is more that of E. paniculatum, and the form of its lip is different, the two terminal lobes being very narrow, and bowed back like the fore legs of the splay-footed truffle dogs.

When we lately published an enumeration of the species of the section Spathium, to which this belongs, it was overlooked, having been mistaken for the very different E. rubrocinctum (or densiflorum ?).

EPACRIS miniata.

Vermilion Epacris.

PENTANDRIA *MONOGYNIA.*

Nat. ord. EPACRIDACEÆ.

EPACRIS. Bot. Reg. vol. 18. *fol.* 1531.

E. *miniata;* ramis tomentosis, foliis sessilibus cordatis mucronatis glabris, floribus solitariis pedicellatis pendulis, cal. lobis bracteisque aristatis margine sublanatis, corollis cylindraceis quadruplò longioribus.

This remarkable plant was exhibited to the Horticultural Society in May last, by Messrs. Loddiges, who had raised it from New Holland seeds. It has been reported that it is one of the many discoveries made by Mr. Gunn, but we do not see either it or the E. grandiflora in any of the extensive collections made by that great investigator of the Tasmannian Flora.

It is very doubtful whether the plant can be regarded in any other light than a beautiful variety of Epacris grandiflora. We are unable, indeed, after a diligent comparison, to discover any distinction beyond the more bristly nature of the sepals and bracts, which are moreover rather more woolly at the edge. In E. grandiflora these parts are sharp-pointed, but in this they terminate in a slender bristle. This is too slender a difference on which to found a specific distinction; but the fruit, which we have not seen, may be peculiar, and at any rate the point may remain open for further investigation.

Our artist has happily imitated the vermilion tube and snow-white limb, whose contrast renders the flowers of this shrub so very gay.

It is a greenhouse plant, and should be potted in heath-mould mixed with silver sand, such as heaths are generally grown in. When re-potted, the neck of the plant (that portion of the stem immediately above the roots) should never be too

deep in the soil, otherwise the plant will soon perish. In summer, plenty of water should be given; but in winter, watering once or twice a week will be sufficient. Fire heat should never be applied except to keep off frost. It may be propagated from cuttings in the usual way.

SYRINGA Emŏdi.

Himalayan Lilac.

DIANDRIA *MONOGYNIA.*

Nat. ord. OLEACEÆ.

SYRINGA. Botanical Register, vol. 20. *fol.* 1733.

S. *Emodi ;* ramis verrucosis, foliis lato-oblongis utrinque attenuatis apice quandoque obtusis reticulato-venosis glabris subtus albescentibus, corollæ limbo patulo laciniis apice uncinatis.

S. Emodi, *Wall. Cat. no.* 2831. *Royle's Illustrations, p.* 267. *t.* 65. *f.* 2. ? *DeCand. Prodr.* 8. 283.

Dr. Royle informs us that "the Himalayan Lilac is found in Kemaon and in Sirmore, on the Suen range, and on the banks of the Giree andJumna rivers." It is not however quite certain that the plant intended by this eminent Botanist is the same as that of Dr. Wallich's distributions, for the leaves have, in Dr. Royle's Indian figure, a very different form, tapering much to the foot-stalk, and the flowers are lilac, not white, in a long leafy panicle ; moreover the segments of the corolla are without the singular inflexed point which is so striking a feature of the plant before us, and which we find equally in the dried specimens distributed by the East India Company. We however also observe that a part of those specimens, not in flower, more resemble Dr. Royle's figure, and it may be that they are mere forms of each other; that however must be left for future consideration.

One thing which is peculiar to this plant, and readily distinguishes it, is the property of producing pale pustule-like callosities on the branches, which gives them a singular appearance. Otherwise it is known from all the Lilacs except Josikæa, by its leaves being very pale on the under side ; and from that by the acuminate hooked lobes of its corolla, to say nothing of the more lucid flat and wide foliage.

This plant flowers in the month of April, in the open ground. Its blossoms have much the look of Privet, and are wholly destitute of the sweet perfume of other Lilacs, instead of which they have a heavy unpleasant smell.

A fine hardy dwarf shrub, attaining the height of from three to five feet, and growing freely in any good garden soil in May and June. It is easily increased by seeds, or by cutting off the smaller side-shoots when half-ripe; the latter should be put in sand and covered with a bell-glass, and kept in a cold pit or frame.

It has been raised in the garden of the Horticultural Society from seeds received from Dr. Royle at different times, under the names of Syringa Emodi and Syringa indica.

STATICE macrophylla.

Large-leaved Sea Lavender.

PENTANDRIA *PENTAGYNIA*.

Nat. ord. PLUMBAGINACEÆ (or LEADWORTS).

STATICE. Bot. Reg. fol. 1450.

S. *macrophylla ;* caule fruticoso supernè folioso, foliis amplis obovato-spathulatis obtusis mucronatis sessilibus, paniculâ compositâ terminali, ramis paniculæ altè alatis, pedicellis anguste alatis cuneatis, calycis limbo crenato-dentato purpureo, corollâ albâ. *Hooker in Bot. Mag. t.* 4125.

S. macrophylla, *Spreng. syst. veg.* 1. 959.

At Plate 6 of the volume of this work for 1839, will be found a full account of Statice arborea; and to that place the reader is referred for information as to the natural habits of this species also, which is said to come from the Canaries, and, having the same manner of growth and much the same appearance, has possibly been mistaken for it in those islands.

The principal differences between the two consist in these things. In S. *macrophylla* the leaves are stalkless and somewhat spathulate; in S. *arborea* they have long distinct stalks, and are much broader. In S. *macrophylla* the flowers are of a rich violet and closely arranged; while in S. *arborea*, they are much smaller, paler, and more loosely disposed.

The accompanying drawing was made from a plant in the nursery of Mr. Forrest of Kensington, in May, 1844. The foliage measured two feet and a half across, and the appearance of the specimen was truly beautiful. It was however found necessary to keep it in the shade, for its white petals wither and lose their freshness beneath the sunshine.

It is a greenhouse shrub, growing three or four feet high, and requiring the same kind of treatment as Statice arborea.

February, 1845.

It thrives in an equal mixture of light sandy loam and peat, made rich with a small portion of well decomposed cowdung.

It should be kept in a warm and rather damp situation during the growing season, and should never be placed out of doors even in summer.

It strikes freely from cuttings of the young wood, when such can be obtained, but owing to the plant making but few lateral branches, it is increased slowly. Its leaves will also strike, but they form a bud on the callus very unwillingly.

It flowers freely during the summer, and remains a long time in perfection, if kept in the shade, as above directed.

MILTONIA cuneata.

Wedge-lipped Miltonia.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § VANDEÆ — BRASSIDÆ, *Lindl. Natural System of Botany, Ed.* 3. *ined.*

MILTONIA. Botanical Register, fol. 1992.

M. *cuneata* (Lindl. in Bot. Reg. 1844. misc. 28.); pseudobulbis ovato-oblongis, foliis oblongis striatis subundulatis, racemo plurifloro, sepalis petalisque lanceolatis undulatis, labello cuneato rotundato basi bilamellato utrinque subrepando, columnâ medio bidentatâ, clinandrio integerrimo.

This very handsome addition to the beautiful genus Miltonia, has already been noticed at No. 28 of the miscellaneous matter of last year; its figure completes its history.

It is a most beautiful Epiphyte, allied to M. *candida*, with flowers nearly four inches in diameter; the sepals and petals a rich brown tipped with green. The lip is pure white, with a tinge of pink near the base, in form quite different from M. *candida*, for it is scarcely at all curled at the edge, is very much narrowed to the base, and has only one pair of plates instead of two and a half. The wings of the column too are scarcely divided or at all events not at all notched. Fig. 2 represents the pollen-masses with their appendages.

It should be potted in turfy heath mould mixed with pot-sherds. During the summer an ample supply of water should be given to its roots, and it should be syringed over head once or twice a day. To prevent the leaves from being scorched as well as to keep the temperature between 80° and 90° by day without admitting much air, shading will be necessary in sunny weather. In winter for a few weeks little or no water should be given, but the house should be filled with steam once every fine day. The temperature should never be raised above 66° by fire heat.

The following is a classed list of the species of Miltonia at present known.

1. M. *spectabilis* (Lindl. in Bot. Reg. sub t. 1976. Aug. 1. 1837. t. 1992. *Macrochilus Fryanus*, Floral Cabinet, t. 45. Sept. 1, 1837); pseudobulbis ovalibus ancipitibus lævibus, foliis ligulatis patentissimis, pedunculis unifloris squamis magnis fuscis striatis imbricatis carinatis densè imbricatis, sepalis ovalibus planis, petalis conformibus revolutis, labello maximo cuneato rotundato basi trilamellato, columnæ alis angustis acutissimis——*Brazil.* ——Flowers very large, solitary, with pale straw-coloured sepals and petals, and a broad violet purple lip ribbed with crimson.

2. M. *flavescens* (Lindl. Sertum, sub t. 48. *Cyrtochilum flavescens*, Lindl. in Bot. Reg. t. 1627); pseudobulbis angustissimis ancipitibus lævibus, foliis lineari-ensiformibus binis scapo æqualibus, scapo compresso arctissimè vaginato, racemo multifloro, bracteis glumaceis flavescentibus carinatis pedunculi longitudine, sepalis petalisque linearibus acuminatis, labello ovato-lanceolato repando crispo basi pubescente inappendiculato.——Said to inhabit Mexico, but most probably *Brazil.*—— Flowers bright yellow with no spots, but a few crimson specks and streaks on the lip. Wings of the column crimson.

3. M. *stellata* (Lindl. Sertum, sub t. 48. *Cyrtochilum stellatum*, Lindl. Sertum, t. 7); pseudobulbis diphyllis ovalibus ancipitibus, foliis ligulatis obtusis scapo multò brevioribus, scapo tereti erecto vaginato, racemo disticho multifloro, bracteis carinatis convolutis acuminatis glumaceis ovario longioribus, sepalis petalisque lineari-obovatis acutis stellatis, labello oblongo undulato acuto basi canaliculato striato, alis columnæ acinaciformibus integerrimis——*Brazil.*——Flowers pale yellow with no spots, lip white with yellow streaks. Wings of the column yellow streaked with crimson. Bracts rose-coloured. This has much larger flowers than the last species, its sepals and petals are not taper-pointed, its pseudo-bulbs are much broader, its stature four times as great, and the colours of the parts different, as will be seen upon comparing the above descriptions.

4. M. *candida* (Lindl. in Bot. Reg. 1838. misc. 29. Sertum Orchidaceum, t. 21.); pseudobulbis ovatis apice angustatis diphyllis, foliis angustis racemo brevioribus, bracteis brevibus ovatis membranaceis concavis squamæformibus, sepalis petalisque oblongis æqualibus, labello subrotundo crispo circa columnam convoluto basi 5-lamellato, columnâ pubescente basi biauri, clinandrio crispo membranaceo-marginato utrinque in alam decurrente.——*Brazil.*——Flowers in long erect racemes, very large; sepals and petals spotted with brown; lip white. There is a large flowered variety in cultivation.

5. M. *cuneata.*

6. M. *Russelliana* (Lindl. in Sertum, sub t. 48. *Oncidium Russellianum*, Lindl. in Bot. Reg. t. 1830); pseudobulbis ovatis costatis diphyllis, foliis ligulato-lanceolatis patentibus, racemo paucifloro, bracteis acuminatis ovario 3-plo brevioribus, sepalis petalisque conformibus ovato-oblongis subundulatis, labello postico oblongo-cuneato retuso apiculato subsinuato, lamellis disci pluribus truncatis, columnæ bidentatæ alis magnis falcatis, stigmatis margine incrassato pubescente colorato.——*Brazil.*—— Flowers dingy greenish purple. Lips dull violet; wings of the column yellow; border of the stigma crimson.

*DISOCACTUS biformis.

Two-shaped Torch-thistle.

POLYANDRIA *MONOGYNIA*.

Nat. ord. CACTACEÆ; or INDIAN FIGS.

DISOCACTUS (Phyllanthidæ). *Flores* e crenis caulium. *Sepala* 4; *petala* totidem latiora; omnia libera et æqualia, in tubum conniventia. *Stamina* subdefinita (12 ?) recta. *Stigmata* 5.

D. *biformis*.
Cereus biformis. *Botanical Register*, 1843. *misc.* 66.

Frutex *debilis subprostratus*. Rami adulti *teretes, spinulis stellatis parcè obsiti*; juniores *alati, articulati, crenati*, floridi *lanceolati basi teretes*, steriles *oblongi, sessiles*. Flores *minores, rosei*. Sepala 4 *linearis-ubulata, sesquipollicaria, apice recurva*; petala *totidem, æqualia, lanceolata, apice patula*. Fructus *sanguinei, ovato-lageniformes*. Semina *polita*, testâ *valde fragili, leviter arcuata*.

The following account of this plant is from the pen of Mr. Booth, of Carclew, to whom I am also indebted for the accompanying drawing.

"It formed part of a collection transmitted by George Ure Skinner, Esq. from Honduras, in 1839, to Sir Charles Lemon, Bart. M.P. It forms a graceful bush, from two to three feet high, but will no doubt attain a much larger size if trained against a trellis, and sufficient room allowed for it to spread.

"*Stems* smooth, round, woody, and branching, about the size of a large quill, deep green. *Leaves* fleshy, oblong-lanceolate, blunt at the point, from two to three inches long, and about an inch wide, tapering to both ends, rounded a little at the base, and having large shallow serratures along the margin, which are each furnished with a single pale projecting hair. *Flowers* solitary, drooping, of a deep pink colour, usually produced at the extremity of the two-years-old leaves. *Sepals* and *petals*, eight in number, similar in form and colour, linear-lanceolate acute, about two inches long,

* From δις twice, ισος equal, and κακτος, in allusion to the distinctive character of the genus.

and a quarter of an inch wide, with a long narrow point. The four outer divisions, besides being more spreading and recurved, are narrower than the four inner ones, which appear to lap over one another, so as to enclose the filaments, unless near the point where they open a little and become recurved. *Filaments* one inch and a half long, very slender, deep pink, with pale yellow anthers. *Style* rather longer than the filaments, split at the point into five roundish oblong pale stigmas. *Ovary* roundish, oblong, slightly curved, and together with the tube an inch long, brownish green.

"The flowers are of short duration, but open in succession for a considerable time. The plant delights in a rich loamy soil mixed with charcoal, and is easily multiplied by means of its leaves, or bits of its stem. Like most others of its tribe it requires a warm temperature, and plenty of light.

"In the beginning of September the plant produces an abundance of beautiful little berries. They are shaped like a very small egg—the largest of them scarcely averaging the size of the common sloe—with the dried remains of the flowers attached to the point of each. The skin is smooth and glossy, semi-transparent, and of a deep purplish crimson, with several minute scales, but without any of those small spines which render the fruit of the prickly pear and other cacti so troublesome. The inside consists of a soft mucilaginous pulp, somewhat paler than the skin, having numerous small dark-brown seeds irregularly imbedded in it, and possesses a sweetish, with something of a sub-acid flavour, by no means unpleasant to the taste. Where novelty is an object, it would almost be worth while to cultivate this plant for the sake of its fruit, not that I think it will ever become of sufficient importance to rank as an auxiliary to the dessert, but for the purpose of ornamenting the varied productions of the cook and confectioner, I believe it will be found extremely useful, and on this account I venture to recommend it to the notice of such as are interested in these matters. The plant is of the easiest culture, and sets its fruit more readily than any other species I know. On the one at this place I counted nearly eight dozen ripe fruit, although the plant does not much exceed two feet in height. It had a very pretty appearance and was quite as ornamental in its fruiting state, as it was when in blossom in the spring."

The species is a warm greenhouse plant, and should be potted in sandy loam and peat, mixed with potsherds, in order that superfluous water may pass off freely. During the summer months an ample supply of water should be given, but in winter (like other Cactaceous plants) it should be kept dry for a few weeks. It may be abundantly multiplied from cuttings in the usual way.

I must now apologize for having referred this plant to the genus Cereus. It is no doubt the type of a peculiar genus, and represents one of the appearances of its order, when the parts are reduced to the smallest denomination. In general, Indian figs are remarkable for the intermingled manner in which the parts of the flower are arranged, as well as for their large number; it is only in the Rhipsalidæ that they assume a constant and definite proportion, and even then the sepals and petals are often distinguished with difficulty. Here, on the contrary, the number of sepals is constantly four, that of the petals the same; and there seems to be no disposition to vary from those proportions. For these reasons it seems to claim rank as a genus upon better grounds than the majority of those admitted by modern Botanists. It in fact connects the tribes of Phyllanthidæ and Rhipsalidæ, resembling the former in its general habit, large showy flowers, and many-seeded fruit; and claiming kindred with the latter by virtue of its equal-parted flowers, definite stamens, and permanent flowers, which shrivel up and cling to the end of the fruit when ripe.

It has been well observed by Dr. Walpers (*Repertorium Botanices systematicæ, vol.* 1. *p.* 269) that the confusion of species and names, in the order of Indian Figs is without a parallel, owing to the negligence or bad descriptions at once of writers, cultivators, and travellers, and that the so-called species are in many cases distinguished by characters of the most trifling nature. The first step to take in sweeping out this Augean stable is to limit the Genera by solid characters; a task which has been undertaken by the Prince of Salm Dyck, with more success than any one. As it will probably be agreeable to the readers of the Botanical Register to know what that arrangement is, the following brief abstract is taken from the work of Dr. Walpers. The details will be found in the *Cacteæ in horto Dyckensi cultæ auctore Principe a Salm*

Dyck (Dusseldorf, 1842, 8vo.) I have a little varied the terminations of the names of the Tribes, as part of a plan for reducing all Botanical terminology to one standard; the details of which will be worked out in a new edition of the Natural System of Botany now passing through the press.

	Number of species included in each genus.
Tribe 1. Melocactidæ.	
1. Melocactus *C. Bauhin*	15
2. Discocactus *Pfeiffer*	1
3. Anhalonium *Lemaire*	1
Ariocarpus Scheidweiler.	
4. Mammillaria *Haworth*	138
Tribe 2. Echinocactidæ.	
5. Echinocactus *Link & Otto*	76
Astrophytum Lemaire.	
Tribe 3. Cereidæ.	
6. Echinopsis *Zuccarini*	11
7. Pilocereus *Lemaire*	2
(This includes Cereus sessilis.)	
8. Cereus *Haworth*	127
Tribe 4. Phyllanthidæ.	
9. Phyllocactus *Link*	7
(This includes C. Ackermanni and speciosus.)	
10. Epiphyllum *Pfeiffer*	1
11. Disocactus *Lindley*	1
Tribe 5. Rhipsalidæ.	
12. Rhipsalis *Gærtner*	17
Hariota Lemaire.	
(To this is referred Cactus alatus.)	
13. Lepismium *Pfeiffer*	3
Tribe 6. Opuntidæ.	
14. Opuntia *Tournefort*	94
Tribe 7. Pereskidæ.	
15. Pereskia *Plumier*	7
	501

BERBERIS trifoliata.

Three-leaved Berberry.

HEXANDRIA *MONOGYNIA.*

Nat. ord. BERBERACEÆ.

BERBERIS. Botanical Register, vol. 6. *fol.* 487.

B. *trifoliata ;* sempervirens, glauca, erecta, fruticosa ; foliis trifoliolatis, foliolis ovatis sessilibus sinuato-spinosis acuminatis : venis lacteis, racemis paucifloris erectis petiolis brevioribus, baccis sphæricis.

B. trifoliata, *Hartweg in Bot. Reg.* 1841. *misc.* 149.

This very rare and beautiful species was found in Mexico by Mr. Hartweg, near the Hacienda del Espiritu Santo, on the road from Zacatecas to San Luis de Potosi, an immense plain occupied chiefly by Opuntias, stunted plants of Prosopis dulcis, and Yuccas. It covered large tracts of country ; the people called it Acrito, and the fruit was much eaten by children. Mr. Hartweg did not see it in flower.

Its sessile ternate holly-like leaflets, beautifully marbled with pale blue and dull green, are entirely different from any thing among the pinnated Berberries hitherto discovered, and it may be added, are very much more handsome.

In the garden of the Horticultural Society, where the annexed figure was made, it forms a dwarf spreading evergreen shrub, growing freely in a rich sandy loam and rather dry situation. It has stood two winters planted against a south wall, and seems to be about as hardy as Berberis fascicularis.

It may be increased in various ways : by layering, by cuttings, or by seeds, but when the kind is rare, like the present, grafting is the most certain and safest way ; the grafting may be performed in the ordinary way in March or

April, and the best stock for working it upon is Berberis aquifolium. When grafted it should be placed in a cold pit or frame, kept close and rather damp. It flowers freely in April and May.

ACHIMÈNES grandiflora.

Large-flowered Achimenes.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. GESNERACEÆ (or GESNERWORTS).

ACHIMENES. Botanical Register, 1842. *t.* 19.

A. *grandiflora;* caule partibusque omnibus herbaceis villosis, foliis oppositis ovato-oblongis petiolatis basi obliquis serratis, pedunculis axillaribus solitariis terminalibusque petiolis longioribus, corollæ tubo limbo longiore compresso basi supra valdè gibboso limbi obliqui inæqualis laciniis rotundatis integerrimis.

A. grandiflora, *DeCand. prodr.* 7. 536. *Bot. Reg.* 1842. *misc.* 59. *Bot. Mag. t.* 4012. *Paxton's Magazine of Botany.*

Trevirania grandiflora, *Schiede in Linnæa*, 8. 247.

Among the species of this brilliant genus none excel in beauty this, which was introduced in 1842 from Belgium, a plant of it having been at that time sent to the Horticultural Society of London by Mr. Van Houtte of Ghent.

We learn from the *Linnæa* that it was originally discovered by Deppe and Schiede in Mexico, growing upon *shady* rocks of the Barranca de Tioselos near the Hacienda de la Laguna. They described it as a most beautiful little plant, attracting attention by its large violet purple flowers, and green leaves stained with purple on the underside.

In appearance it is most akin to *A. longiflora*, of which it has the habit: but its rich crimson-purple flowers are very unlike the violet ones of that species. They are also less delicate in texture, and do not suffer so much from accidents.

Another fine species of this kind is the Achimenes patens, found by Mr. Hartweg in *shady places* between Zitaquara and the Hacienda de Laureles; it has the notched corolla of A. hirsuta, flowers like those of A. longiflora, and a long spur projecting from one side of the bottom of the tube of the corolla. Unfortunately it has still to be imported.

Fig. 1. represents the relative position of the stamens and style, together with the rudiments of a fifth stamen.

It is a stove plant, which requires to be grown in a shallow pot. The soil most suitable is rough sandy peat. In February it should be repotted with four or five of the scaly tubers or underground stems in each pot. During the growing season an ample supply of water should be given, but it must be shaded in sunny weather. After flowering the plant will naturally die down, when it should be kept quite dry and free from frost till the following season. It may either be propagated from cuttings or by the tubers which it forms annually at its roots.

APHELANDRA aurantiaca.

Orange Aphelandra.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. ACANTHACEÆ.

APHELANDRA, R. Br. *Calyx* quinquepartitus, inæqualis. *Corolla* hypogyna, ringens, labio superiore subfornicato, bidentato, inferioris tripartiti laciniis lateralibus multo minoribus. *Stamina* 4, corollæ tubo inserta, inclusa, didynama; *antheræ* uniloculares, muticæ. *Ovarium* biloculare, loculis biovulatis. *Stylus* simplex; *stigma* bifidum. *Capsula* teretiuscula, bilocularis, tetrasperma, loculicide bivalvis, valvis medio septiferis. *Semina* compressa, retinaculis subtensa ——Frutices *Americæ tropicæ;* foliis *oppositis*, spicis *axillaribus et terminalibus tetragonis*, bracteis *oppositis*, *submembranaceis*, bracteolis *angustis*, corollis *speciosis*, *rubicundis*.—Endl. gen. 4074.

A. *aurantiaca;* foliis oblongis glabris basi undulatis in petiolum brevem decurrentibus, spicis simplicibus tetragonis, bracteis ovatis acuminatis serratis, corollæ laciniis ovatis acutissimis lateralibus duplo brevioribus.
Hesemasandra aurantiaca, *Hort.*

This is the handsomest stove shrub that has been introduced for a long time, and in the estimation of cultivators must class with Ixora coccinea, Aphelandra cristata, the Hindsias, Jacquinia aurantiaca, and other front-rank species.

It was exhibited at a late meeting of the Horticultural Society, by Mr. Henderson of Pine Apple Place, under the title of Hesemasandra aurantiaca, a name not to be found in any Botanical books in our possession. It is probably some error, and the word may have been Hemiandra (half anther), in allusion to each anther having but one lobe, as is shewn at fig. 1; but Hemiandra is really a totally different plant.

Can it be Schrader's *Synandra amœna*, the *Aphelandra ignea* of Nees von Esenbeck? concerning which we find nothing beyond the names in Dietrich's Synopsis plantarum.

We have only seen it on the occasion just alluded to, but we could not then perceive any thing to separate it from the

well-known genus Aphelandra, and thither it is accordingly now referred.

Colourers are quite unable to give the soft and brilliant glow of the rich orange-coloured flowers, which may perhaps be compared with that of the ripest side of a Brussels Apricot when coated by varnish.

We presume that some part of South America is the origin of the plant, but upon that point we have no information.

EUSTŎMA exaltátum.

Tall Eustoma.

PENTANDRIA *MONOGYNIA*.

Nat. ord. GENTIANACEÆ.

EUSTOMA, D. Don. Calyx 5-6-partitus, segmentis exalatis subulatis. *Corolla* infundibulari-rotata, marcescens, limbo 5-6-partito. *Stamina* 3-6 corollæ fauci inserta. *Antheræ* incumbentes, rimis dehiscentes, demum recurvæ. *Ovarium* valvis paulum introflexis, sub-1-loculare 1-semi-2-loculare ovulis ad suturam insertis. *Stylus* distinctus, deciduus, *stigmate* bilamellato, lamellis ovali-subrotundis. *Capsula* bivalvis septicida, sub-1-locularis vel semi-2-1-locularis, placentis spongiosis. *Semina* funiculis destituta, globosa.—Herbæ *annuæ vel perennes, Americæ borealis subtropicæ, glaucescentes*, floribus *paucis speciosis cæruleis*.—Griseb. in DC. Prodr. 9. 51.

E. *exaltatum*; foliis basi cordatis elliptico-oblongis subacuminatis obtusatisve connato-amplexicaulibus, corollæ lobis elliptico-oblongis acuminatis tubum duplo superantibus, capsulâ sub-1-loculari.—*Griseb. in D.C. Prodr.* ix. 51.

Eustoma exaltata, "*Descourtils, fl. t.* 15."
Lisianthus exaltatus, *Lam. ill. p.* 478.
Lisianthus glaucifolius, *Jacq. pl. rar. t.* 33.
Chlora exaltata, *Gris. Gent.*
Eustoma silenifolium, *D. Don in G. Don syst. gard. p.* 175.
Urananthus glaucifolius, *Benth. Pl. Hartw. p.* 46.

It appears, from the researches of Dr. Grisebach, that Lisianthus Russellianus, this plant, and another or two like them, constitute a peculiar genus, which Mr. Bentham called Urananthus, but which had been previously named Eustoma by the late Professor Don.

It is therefore necessary to cancel the common name of this plant in favour of that which is now given. Under the designation of Lisianthus glaucifolius the species is circulating among gardeners as something new; but it is in truth a species respectable for its antiquity, having been described years ago by Lamarck under the name of Lisianthus exaltatus, and by Jacquin as L. glaucifolius. It is the celebrity of L. Russellianus that has again brought it into notice.

It is a native of various parts of North America: the warm parts of Mexico on the coast of the Pacific, Vera Cruz, Tampico, Cuba, St. Domingo, the Havannah, and the Arkansas, are all set down as stations whence it has been brought. It is however by no means clear that all the plants thus collected are really the same species; for we find, in our specimens from the north of Mexico, that the style is very much longer than in the plant now figured, which flowered in the Nursery of Mr. Glendinning, of Turnham Green, in July last. Fig. 1. shews the ovary, style and stigma, as they then appeared.

Although not to be compared with Eustoma (Lisianthus) Russellianum, it is far from being destitute of beauty. Its foliage is very neat, and its blossoms rather handsome. The greatest fault in it is its stiff naked-branched habit.

It is a warm greenhouse annual, the seeds of which should be sown about Midsummer. The plants will naturally come weak at first, but to retard their flowering till the following season, as well as to strengthen them, they should be stopped at every other joint until they have produced a sufficient quantity of lateral shoots. The soil which seems most suitable is sandy peat. Water and heat should be liberally given during the growing season.

CALATHĒA villōsa.

Shaggy Calathea.

MONANDRIA *MONOGYNIA*.

Nat. ord. MARANTACEÆ.

CALATHEA. Botanical Register, vol. xi. *t.* 932.

C. *villosa ;* acaulis, molliter villosa, foliis petiolatis oblongis scapo vix longioribus, spicâ elongatâ cylindraceâ, bracteis distantibus cucullatis apice patulis acuminatis, limbi corollæ interioris laciniâ superiore obovatâ emarginatâ inferiore oblongâ bilobâ.

A native of Demerara, whence it was sent by the Chevalier Schomburgk to Messrs. Loddiges, with whom it flowered in July, 1843.

It is not possible, in the present state of the Marantaceous order, to say much about its affinity, without a very careful examination of all the species to be found in books; but we presume that it is nearly related to Roscoe's Phrynium cylindricum.

Its very shaggy leaves, and flower-spikes, taken along with the lengthened cylindrical form of the latter, offer discriminating marks that are not to be mistaken.

Fig. 1. represents a flower split open to shew the style, stigma and stamen; 2. is a perpendicular section of the ovary; 3. is a transverse section of the same.

It is a stove plant, requiring to be potted in sandy loam and peat in equal proportions. During the summer months an ample supply of water should be given. Being tender, it will be advisable not to give much air, but to use shading in sunny weather. The temperature during the growing season may be raised to 85° by day, and about 70° by night. In winter the temperature should never be raised above 66° by fire heat. It is propagated from offsets.

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MYOPŎRUM serrātum.

Saw-leaved Myoporum.

TETRANDRIA *MONOGYNIA.*

Nat. ord. MYOPORACEÆ.

MYOPORUM, Banks et Sol. *Calyx* quinquepartitus, fructifer haud mutatus vel parum auctus. *Corolla* hypogyna, subhypocraterimorpha, tubo brevi, amplo, limbo quinquelobo, subæquali. *Stamina* 4, corollæ tubo inserta, exserta v. inclusa, didynama. *Ovarium* biloculare loculis collateraliter biovulatis, v. quadriloculare, loculis uniovulatis; ovula pendula, anatropa. *Stylus* terminalis; *stigma* obtusum. *Drupa* baccata, bilocularis v. quadrilocularis, tetrasperma, loculis monospermis v. dispermis. *Semina* inversa. *Embryo* in axi albuminis carnosi; radicula supera.——Frutices *in Nova Hollandia, imprimis extratropica obvii, in insulis oceani rari;* ramulis *foliisque novellis sæpe fucatis, viscidis* foliis *alternis v. rarius oppositis, integerrimis, serratis, sæpe pellucido-punctatis,* pedunculis *axillaribus fasciculatis, raro solitariis, unifloris, ebracteatis,* floribus *albis v. purpurascentibus, fauce sparsim barbata.*—Endl. gen. no. 3733.

M. *serratum;* foliis lanceolatis acutissimis serratis ramisque lævibus, *R. Br. Prodr.* 372.

Pogonia tetrandra, *Lab. nov. holl.* 1. 59. *t.* 83.

If this plant had not been figured by Labillardière, we should have entertained a doubt of its being Brown's *M. serratum*, by which name it is known to Mr. Gunn, who has distributed an abundance of beautiful dried specimens under the number 427. The cause of our doubt would have been the number of cells in its ovary; for they are certainly two, both in the wild Tasmannian plant and in that of the gardens; but in the arrangement of the learned Botanist who first referred the plant to Myoporum, they are stated to be four. We have no means of reconciling this discrepancy.

Mr. Gunn says that the plant is called in the colony "Mangrove," and is very common in the sand close to the sea, where it grows in company with Acacia Sophera, and Leucopogon Richei. It forms a very close bush from six to ten feet high. In cultivation in Tasmannia it becomes a very

pretty round-headed shrub, whose flowers are succeeded by blue fruit.

In our gardens it forms a neat bush loaded with a profusion of white flowers, as large as those of Hawthorn, and spotted with purple.

Fig. 1. represents the corolla split open; 2. a perpendicular section of the ovary; 3. a transverse section of the same.

The accompanying figure was made in the garden of the Horticultural Society, in May, 1844.

It is a greenhouse plant, which should be potted in sandy peat, such as heaths are generally grown in. During summer an ample supply of water should be given, and air at all times when the weather is favourable. For a few weeks in winter, water once or twice a week will be sufficient. Fire-heat should never be applied except to keep off frost. It may be propagated from cuttings in the usual way.

PENTSTĒMON gentianoïdes, *var.* diaphanum.

Transparent Gentian-like Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARIACEÆ.

PENTSTEMON. Bot. Reg. vol. 13. *fol.* 1131.

P. gentianoides. *Supra*, 1838. *t.* 3. *Hooker in Bot. Mag. t.* 3661.
Var. *transparens ;* floribus ventre pallidis semidiaphanis, caulibus viridibus, calycibus glandulosis villosis.

The beautiful gentian-like Pentstemon is now so universally known in gardens, that every one will at once perceive wherein the plant, now represented, differs from it.

The flowers are rather larger, and almost colourless on the under side of the tube, which is moreover so thin as to be semi-transparent, and to allow the filaments to be perceived through it. The calyx too is much more covered with glands than in the true gentianoides. The latter has by some dealers been called suffruticosum, a preposterous name, and calculated to mislead; for it is not more suffruticose than half the common herbaceous plants in cultivation. Its stems become a little woody at their base, and so do the stems of Turnips and Radishes, and Mustard and Cress, which might, with just as much propriety, be called under-shrubs.

We also find that it is known under the name of P. grandiflorum, which is quite a different species.

This is a very handsome and nearly hardy perennial, growing two or three feet high in any good rich garden soil, and becoming rather woody next the ground. It flowers freely from July to September, and like most of the Mexican species is easily increased either by seeds, or cuttings of the half ripened shoots.

It is no garden variety, but was raised from seeds received from G. F. Dickson, marked from the Tierra Fria of Mexico.

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PHÆDRANASSA chloracra.

Crimson and Green Phædranassa.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDACEÆ.

PHÆDRANASSA, Herbert. *Germen* deflexum trigonè oblongum apice constricto. *Tubus* crassus decurvus latere inferiore breviore sexcostato-compactus profunde sexsulcatus ore angustato. *Limbus* pendulus laciniis spatulatis convolutis, *sepalis* inferne margine fistulæformiter convoluto superne lamina latiore. *Filamenta* complanata inferne gradatim latiora infra tubi faucem pariter inserta conspicue decurrentia recta, superiora tria breviora, inferiora producta; *antheræ* breves versatiles infra medium affixæ. *Stylus* rectus stigmate simplici clavato.——Plantæ *Americanæ* bulbo *ovato*, scapo *tereti crasse carnoso anguste fistulato;* foliis *hysteranthiis petiolatis.*— Herbert in Botanical Register, 1844. misc. 93.

P. *chloracra;* caule bipedali, umbella circiter sexflora, spatha bracteata marcescente, pedunculis subæqualibus $\frac{5}{8}$-$\frac{7}{8}$ unc. viridibus, germine $\frac{5}{16}$ unc. viridi, perianthio ultra-vel subbiunciali rubro laminis viridibus margine pallido subundulato subacutis, stylo perianthium filamentis albis stylum album superantibus, antheris pallide subluteis, foliis viridibus subacutis petiolo 1-2-unciali lamina subpedali circiter $2\frac{3}{4}$ uncias lata.—*Herbert, l. c.*

This is one of the curious bulbs met with by Mr. Hartweg in Peru. It occurred on rocks at the village of Saraguru, near Loxa, at an elevation of about 9,000 feet above the sea, and was supposed to be the long sought *Hæmanthus dubius* of Humboldt and Kunth.

When the learned Dean of Manchester recast the genera of Amaryllids, he found it necessary to remove the plant from Hæmanthus, with which it has no other than an ordinal affinity, and he stationed it in Phycella, to which it appeared more likely to belong. The examination of fresh flowers has however shewed that it constitutes a peculiar genus, to which Dr. Herbert has given the name of Phædranassa (it is to be presumed from *φαιδρος* gay, and *ανασσα* queen). He regards it as an approach to Stenomesson and Pentlandia. The want

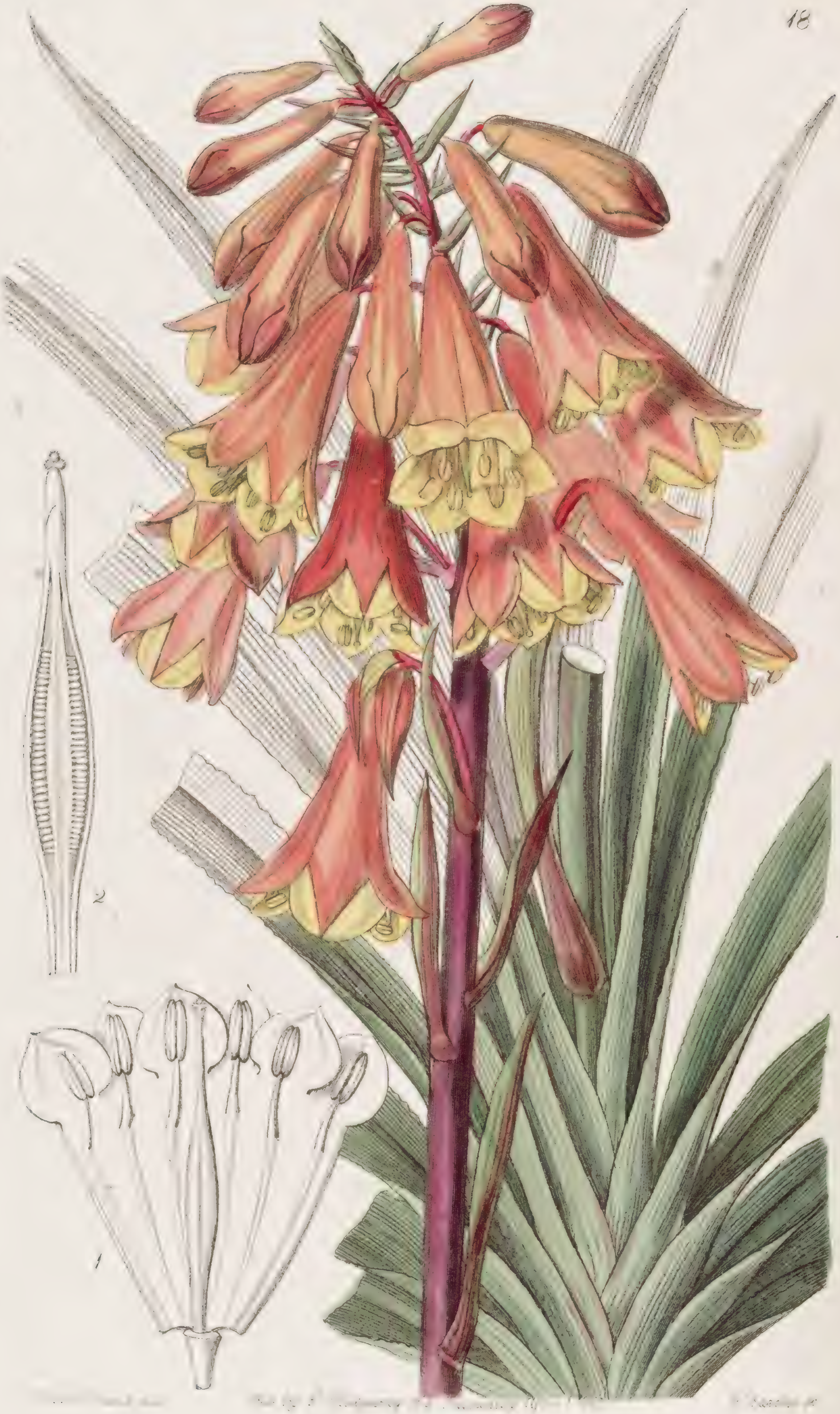
of the peculiar faucial scales of Phycella certainly removes it from that genus.

Fig. 1. shews the manner in which the bases of the filaments are connected with the ovary; 2. is a tranverse section of the ovary.

Another species of Phædranassa is the Phycella obtusa, mentioned in the last volume of this work, at No. 93 of the miscellaneous matter. It was also one of the discoveries of Mr. Hartweg, who collected it on the arid banks of the river Guallabamba, in the valley of San Antonio, in the province of Quito, at an elevation of about 7,000 feet above the level of the sea. As this was the place where Humboldt and Bonpland found their *Hæmanthus dubius*, it is not improbable that it is of P. obtusa rather than chloracra that this plant is a synonym.

Both species of Phædranassa are greenhouse bulbs, requiring the same kind of treatment as Phycella. They should be potted in a light rich sandy loam, kept quite dry during the season of rest, and fully supplied with moisture when in a growing state. They flower during the winter and spring months, before the leaves appear, and are increased by dividing the bulbs when in a dormant state.

The accompanying figure was made from a specimen, which flowered at Bury Hill near Dorking, under the care of Mr. Scott, gardener to Charles Barclay, Esq.



BLANDFORDIA marginata.

Rough-edged Blandfordia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. LILIACEÆ.

BLANDFORDIA, Smith. Calyx tubuloso-infundibularis, coloratus, 6-fidus, regularis, marcescendo-persistens; laciniis plurinerviis, ovatis, acutiusculis, æqualibus. *Stamina* 6, tubo calycino superne inserta, æqualia, vix exserta. *Filamenta* filiformia, glabra. *Antheræ* biloculares, oblongæ, obtusæ, dorso supra basim bifidam pro receptione filamenti extinctoriiformi perforatæ, introrsæ. *Ovarium* liberum longe stipitatum, angustum, trigonum, triloculare; ovula in loculis crebra, biseriata, horizontalia, anatropa, ad chalazam galeato-incrassata. *Stylus* terminalis, subulato-filiformis, trisulcatus. *Stigma* stylo vix latius, obtusum, integrum. *Capsula* longissime stipitata, coriacea, lanceolata, prismatico-triangularis, stylo persistente terminata, trilocularis, septicido-tripartibilis; carpidiis sutura ventrali dehiscentibus; columella centrali nulla. *Semina* biseriata, marginibus suturæ affixa, horizontalia, subcylindracea, levissime sigmoideo-flexa, acuminata, basi obtusa, retrorsum papilloso-pilosa; testa membranacea, fusca, subsolubilis. *Embryo* cylindraceus, rectus, axilis, albumine triplo brevior; extremitas radicularis hilum attingens. (Descr. fruct. et sem. juxta β. grandifloram.)——Herbæ *perennes;* radice *fibrosa.* Folia *radicalia, linearia, elongata, striato-nervosa, basibus dilatatis semivaginantia, rigida; caulina distantia, abbreviata.* Caulis *teres, simplex, subscapiformis, apice racemoso-multiflorus.* Flores *solitarii, pedicellati, punicei; pedicellis haud articulatis, floriferis recurvis, fructiferis erectis, basi bibracteatis;* bractea *altera interiore laterali minore.*—Kunth. enum. 4. 589.

B. *marginata;* foliis rigidis suberectis margine toto scaberrimis, floribus conicis longè racemosis pendulis, bracteis lineari-lanceolatis foliaceis pedicellis semper æqualibus v. longioribus.

B. marginata, *Herbert in Bot. Reg.* 1842. *misc.* 93.

Aletris punicea, *Lab. nov. holl.* 1. 85. *t.* 111.

Folia *margine scaberrima, nec apice tantum serrata.* Bracteæ *foliaceæ, lanceolatæ, pedunculis semper æquales imò longiores.* Perianthium *conicum nec supra basin contractum, ventricosum.* Flores *ahenei nec dimidio superiore luteo.* Sepala *acuta nec obtusissima.* En! discriminis satis superque inter hanc & Bl. grandifloram.

It seems to have been the opinion of every body till lately, that the Genus Blandfordia, one of the finest in New Holland, and easy to cultivate, consisted of two species only,

B. nobilis and grandiflora, and these were principally distinguished by their foliage, and the length of their bracts as compared with the flower-stalks.

Two or three years since, however, there appeared in the Nursery of Messrs. Osborne and Co. of Fulham a most beautiful species, which the Dean of Manchester at once perceived to be distinct and called B. marginata, in consequence of the roughness of the edges of its leaves. It was indeed far handsomer than B. grandiflora, from which it differed in its flowers being deep copper colour instead of half red and half yellow, in its long leafy bracts, and in the shape of its blossoms which form a nearly regular cone, instead of being contracted above the base, and then inflated in the upper division.

That plant is now figured. It is a native of Van Diemen's Land, where it appears to be abundant, and is we presume the real Aletris punicea of Labillardière. Dried specimens of it, in the most beautiful preservation, were sent to his friends by Mr. Gunn, who found it abundantly on Rocky Cape in the year 1837, growing in poor quartz sand, and usually where the soil was rather wet. It was Mr. Gunn's wish that the species should bear the name of Mr. James Backhouse, an excellent practical Botanist, and extremely well acquainted with the Tasmannian Flora. The Dean of Manchester's designation having been published Mr. Gunn's wish cannot be carried into effect. I am happy however to find that Van Diemen's Land produces another species quite different from B. grandiflora, to which Mr. Backhouse's name can be applied.

Blandfordia Backhousii was sent home by Mr. Gunn among his early collections, under the number 241, from the banks of the river Mersey, fifty miles from Launceston. This plant has nearly the leaves of B. grandiflora, but its flowers have a tendency to form a corymb; their form is that of B. marginata, and their bracts are of the same nature but much narrower and weaker, and not one half the length of the slender flower-stalks. My specimen has twenty-three flowers, and must have made a splendid appearance when alive.

None of these are, however, to be compared for beauty with a plant of which the late Allan Cunningham gave me a specimen, the flowers of which are fully twice as large as those of B. marginata. The leaves have neither serratures nor roughness on the edge, but are perfectly smooth and seem to have been glaucous. The flowers are of more deep rich red tint, except at the end of the petals; they grow almost in umbels, as is the case with B. nobilis, and their stamens have long weak filaments, on which they project beyond the petals. No locality for this plant is given on Cunningham's ticket, which only bears the word "Blandfordia."

In order to make these distinctions the more apparent the following comparative characters have been drawn up.

1. B. *nobilis* (Smith, B. R. 286); foliis angustissimis integerrimis, floribus ventricoso-infundibularibus subumbellatis pendulis, bracteis ovatis mucronatis pedicellis brevioribus.——*New Holland, in the region of Sydney*——Flowers red, with the upper half yellow. This species produces its flowers on so short an axis that they appear as if in umbels. The bracts are very short, and half petaloid.

2. B. *grandiflora* (R. Brown, B. R. 924); foliis rigidis erectis angustis apice serratis, floribus brevè racemosis ventricoso-infundibularibus pendulis, petalis retusis, bracteis ovatis acutis pedicellis floriferis subæqualibus. ——*New Holland, in the region of Sydney.*——Flowers red, with the upper half yellow; in a short raceme. The bracts here are less membranous and longer than in the last; but they are always shorter than the fruit-stalks, or even than the flower-stalks soon after blossoming.

3. B. *marginata* (Herbert); foliis rigidis suberectis margine toto scaberrimis, floribus conicis longè racemosis pendulis, petalis rotundatis, bracteis lineari-lanceolatis foliaceis pedicellis semper æqualibus v. longioribus.——*Van Diemen's Land, about Rocky Cape, in sand.*——Here the flowers are of a deep rich copper colour on the outside, and yellow only within and at the edges of the

petals, whose back ends in a sharp point. The bracts are always hard, green, and somewhat leafy, even when the plant is in fruit.

4. B. *Backhousii* (Gunn, mss.); foliis rigidis apice serratis, floribus conicis longè racemosis subcorymbosis, petalis ovatis, bracteis lineari-lanceolatis acuminatis pedicellis duplo brevioribus.——*Van Diemen's Land, on the banks of the Mersey river.*——Flowers apparently similar to those of *B. grandiflora*, but their colour is unknown. The flower-stalks are very long and slender, and give the inflorescence a tendency to become corymbose; they are at least twice as long as the bracts, which are themselves very long and slender.

5. B. *Cunninghamii*; foliis patulis subdebilibus omninò integerrimis lævibusque, floribus conicis apice inflatis subumbellatis pendulis laciniis omnibus acutis, staminibus exsertis, bracteis rigidis foliaceis pedicellis brevioribus.——*New Holland; locality unknown*——The inflorescence is that of Blandfordia nobilis. The flowers are very much larger than in any of the above species, of a more uniform reddish colour externally, except at the upper end of the petals, where yellow appears. The long filaments carry the anthers visibly beyond the limb of the flower.

Bl. marginata should be treated as a greenhouse plant, and potted in sandy loam and peat well mixed together. Being an inhabitant of wet places it naturally requires a good supply of water during the summer season, and air at all times when the weather is favourable. In winter it should be kept on some airy shelf near to the glass where it may be much exposed to the sun. It may be abundantly increased from seeds, or by dividing the root-stock.

Fig. 1 represents a flower split open; 2, a longitudinal section of the ovary.

SPATHOGLOTTIS Fortūni.

Mr. Fortune's Spathoglottis.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § EPIDENDREÆ—BLETIDÆ.

SPATHOGLOTTIS, Blume. Perianthium subregulare, nec galeatum. *Sepala* patentia, libera, æqualia. *Petala* paulò latiora magisque membranacea, patentia v. conniventia. *Labellum* cum basi columnæ articulatum, nunc saccatum, tripartitum, laciniâ intermediâ unguiculatâ basi tuberculatâ v. cristatâ sæpiùs utrinque unidentatâ. *Columna* alata v. petaloidea. *Anthera* bilocularis. *Pollinia* 8.—— Herbæ *Asiaticæ, terrestres,* cormis *subterraneis,* foliis *ensiformibus plicatis.* Flores *nunc lutei nunc violacei.*

Sp. Fortuni; foliis binis lanceolato-linearibus scapo pubescente brevioribus, racemo secundo pubescente, bracteis acuminatis ovario duplo brevioribus, sepalis ovatis obtusis, petalis oblongis subsessilibus latioribus, labelli laciniis lateralibus oblongis erectis intermediâ cuneatâ emarginatâ, ungue utrinque dente aucto, lamellis tribus basi villosis carnosis subdentatis lateralibus truncatis intermediâ ad apicem fere procurrente, columnâ oblongâ apice denticulatâ, polliniis inæqualibus omnibus acutis.

One of the first plants which Mr. Fortune met with on the granitic mountains of Hong Kong, was the pretty little Bletia-like plant figured in this plate. From some corms of it, which he sent home in his first despatch, the specimen sprang up of which the annexed drawing was made in the Garden of the Horticultural Society in January last.

Like the Bletias it has thin plaited leaves, and fleshy tubers, or corms, which lie dormant for some months after the foliage has disappeared. The genus, indeed, differs from Bletia principally in having the middle lobe of the lip stalked, with some deep plates at its base, and in its anther having but two cells instead of eight.

It appears that there are three species of this genus very much alike in their general appearance and yellow flowers; the only one of which hitherto published has been *S. pubescens,* found by Dr. Wallich on the Sylhet mountains, at Prome, and on the Avan mountain called Tong Dong. This plant differs from the present in having much smaller bracts, and perhaps larger leaves, and especially in the form of its lip, which wants the pair of teeth at the bottom of its middle segment; its pollen-masses too appear, from my memoranda, to be bluntly cuneate and not acute. Another species I owe to Mr. Griffith's Khasiyan collections. This has very small narrow grassy leaves, acute sepals, flowers on much longer stalks, and a lip without either hairs, teeth, or tubercles at

the base of its middle lobe, while of the three plates those at the sides are truncate and conspicuous, but the middle plate is merely a raised line; the column of this species is moreover remarkably long and narrow. The technical distinctions of them will be found below.

I also find among Mr. Cuming's Manilla plants, a fine species gathered on Mindanao, in the province of Miscamis, with as many as twenty flowers in a raceme, and the stem and very obtuse bracts coated with a close fur. The specific character of that is added under the name of Sp. tomentosa. If any are possessors of a Manilla Spathoglottis, resembling S. plicata, or Paxtonia rosea in herbage, they would do well to take care of it, for it may be this S. tomentosa, which seems to be really a fine thing.

S. *pubescens* (Lindl. gen. & sp. orch. p. 120); foliis binis linearí-lanceolatis basi angustatis scapo pubescente longioribus, racemo secundo pubescente, bracteis minutis acutis, sepalis ovatis acutis, petalis oblongis obtusis, labelli laciniis lateralibus oblongis erectis intermediâ cuneatâ emarginatâ, lamellis tribus basi villosis carnosis lateralibus truncatis intermediâ parum elevatâ cis apicem evanescente, columnâ oblongâ apice denticulatâ (?), polliniis obtusis inæqualibus 4 cuneatis.——*Sylhet mountains, Prome, and Tong Dong mountain in Ava.*

S. *parvifolia*; foliis solitariis gramineis scapo pubescente multò brevioribus, racemo trifloro pubescente, bracteis acuminatis glabriusculis pedicellis brevioribus, sepalis ovatis acutis, petalis oblongis manifeste unguiculatis, labelli laciniis lateralibus oblongis erectis intermediâ lineari subcuneatâ indivisâ, lamellis tribus basi glabris lateralibus truncatis intermediâ filiformi, columnâ angustâ elongatâ.——*Khasiya hills.*

S. *tomentosa*; foliis binis lato-lanceolatis scapo tomentoso longioribus, racemo tomentoso multifloro, bracteis obtusissimis concavis rigidis velutinis pedicellis multo brevioribus, sepalis petalisque obtusissimis his latioribus, labelli laciniis lateralibus erectis lineari-oblongis truncatis intermedia apice reniformi ungue elongatâ lineari angustissimâ basi hastatâ, lamellis 2 ad basin lanceolatis semiconnatis erectis, columnâ angustâ elongatâ.——*Mindanao.*

The analyses in the accompanying plate represent, 1. a lip spread open so as to shew the lamellæ, and the lateral teeth of the middle segment; 2. the column; 3. the pollen-masses.

IOCHROMA tubulosa.

Tubular Iochrome.

PENTANDRIA *MONOGYNIA*.

Nat. ord. SOLANACEÆ.

IOCHROMA, Bentham. Calyx ovato-tubulosus, subinflatus, 5-dentatus. *Corolla* tubulosa v. tubo longo infundibuliformis, limbo plicato 5-dentato v. 5-fido. *Stamina* 5, corolla paullo breviora, prope basin tubi inserta. *Antheræ* oblongæ loculis longitudinaliter dehiscentibus. *Ovarium* biloculare placentis a dissepimento (sectione transversali) stipitatis bifidis multiovulatis. *Stylus* apice clavato-capitatus emarginatus v. brevissime bifidus crassiuscule stigmatosus. *Bacca* indehiscens calyce inclusa, pulpa tenui. *Semina* numerosa compressa, orbicularia v. reniformia. *Embryo* curvatus? ——Frutices *Ecuadorenses, tomentosi v. pubescentes.* Folia *alterna, petiolata, ovata v. oblonga, integra.* Cymæ *pauciforæ, sessiles, v. breviter pedicellatæ, primum terminales mox laterales.* Corollæ *cyaneæ, speciosæ.*—Bentham in litteris.

I. *tubulosa;* foliis ovatis, calyce (4-lineari) corolla 3-4-plo breviore, corolla tubulosa brevissime 5-dentata.—*Bentham in litteris.*
Habrothamnus cyaneus, *Lindl. in Botanical Register,* 1844. *misc.* 68.

In the opinion of Mr. Bentham the plant now figured, which was mentioned in the last volume of this work under the name of Habrothamnus cyaneus, is better separated as a peculiar genus, to which two other species, also found by Mr. Hartweg in Equatorial America, must be added. "This new genus," writes Mr. Bentham, "differs from Habrothamnus in the æstivation of the corolla; and as far as I can judge from a not quite ripe fruit, in the fruit and seed belonging to the tribe of true Solaneæ not to the Cestrineæ. Mr. Hartweg states that the fruit is pulpy, a sort of berry, and not a dry capsule."

Mr. Hartweg found this plant in the form of a shrub, from four to six feet high, growing on the mountains of Yangana, near Loxa. It flowered in the Garden of the Horticultural Society in August, 1844.

The other species above alluded to are—

I. *calycina* (Bentham); foliis elliptico-oblongis, calyce maximo (pollicari) basi inflato, hinc demum breviter fisso, corolla tubulosa brevissime 5-dentata.——*Woods of Guayan, n.* 1312, *of Mr. Hartweg's dried plants.*

I. *grandiflora* (Bentham); foliis lato-ovatis, calyce (4-lineari) corolla tubo 3-4-plo breviore, corollæ infundibuliformis limbo late 5-lobo.——*Mountains of Saraguru, n.* 814 *of the dried specimens in Mr. Hartweg's collections.*

This is a handsome, free flowering, deciduous greenhouse or half-hardy shrub, about four feet high.

It grows freely in an equal mixture of sandy loam and peat; but when the plants are young they should be grown in a richer soil, in order to gain size and substance quickly. When they have attained a considerable size, they require to be kept rather dry, and to be stunted in the pots. A good way to treat the plant is to turn it, when young, into the open border in a very rich soil, about the end of May, to supply it abundantly with moisture during the summer, and to take it up about the end of September. Pit it, keeping it in a close place for a week or two to recover the shift, and then to place it in a rather dry situation, where it is secure from frost for the winter. About the middle of the following March cut it back rather freely, and top-dress the soil in the pots, but by no means re-pot it; allow it to start in a rather cool but not very dry situation. As it advances, water more freely, and, finally, keep it rather close and damp to cause it to flower freely.

It is easily increased from cuttings of the half-ripened wood, put in sand, and kept close in a warm situation. It blooms freely from July to October, having sometimes upwards of thirty flowers in a cluster.

ORNITHOGALUM marginatum.

White-edged Ornithogalum.

HEXANDRIA *MONOGYNIA*.

Nat. ord. LILIACEÆ.

ORNITHOGALUM, L. Calyx corollaceus, 6-sepalus, regularis, persistens; sepala ima basi connata, pluri-(3-7)-nervia, subæqualia, patentia. *Stamina* 6, imæ basi sepalorum inserta (subhypogyna Endl.) *Filamenta* complanata, apice subulato-angustata, interdum 3 interiora paulo latiora et longiora. *Antheræ* biloculares introrsæ, oblongæ vel lineari-oblongæ, basi bifidæ, dorso affixæ, tardius incumbentes. *Ovarium* liberum, sessile, triloculare; *ovula* in loculis complura (6-18), biseriata, horizontalia, anatropa. *Stylus* erectus. *Stigma* capitato-trilobum, rarius obtusum, integrum. *Capsula* membranacea, trigastra, apice rotundata, vertice depressa, trilocularis, superne loculicido-trivalvis. *Semina* in loculis pauca vel plura, biseriata, oblique obovata, sæpe pressione mutua angulata (ovato-subglobosa v. angulata Nees ab Esenb.) ad hilum tuberculo rostrata rhaphe laterali angulato-prominente notata, reticulata (rugolosa *Nees ab Esenb.*), nigra nitida; *testa* membranacea (subcoriacea *Gærtn.*) *albumini* carnoso (farinoso duro *Gærtn.*) adnata, basi ad hilum substipitato-relaxata. *Embryo* axilis, rectus (leviter curvatus *Gærtn.*) nunc cylindraceus, albumine dimidio brevior; nunc minutus cylindraceo-oblongus; radicula hilum attingens.——Herbæ *bulbosæ, scapigeræ;* bulbus *tunicatus.* Folia *carnosula striato-nervosa.* Scapus *apice racemoso vel corymboso-multiflorus rarius pauciflorus.* Flores *pedicellati, solitarii erecti, albi, viriduli, rarius lutei, aurantiaci vel miniati;* pedicellis *bractea membranacea stipatis.*——Differta Scilla tantummodo ob flores nunquam cœrulescentes neque rubescentes, a Drimia ob calycem inferne non conniventem in tubum et ob bulbum compactius tunicatum. Gawl. in Bot. Reg. p. 158.—Inter Hyacintheas quasi Phalangium refert. *Kunth En. plant.* iv. p. 349.

O. *marginatum;* foliis ascendentibus latiusculis canaliculatis margine nec medio albis scapo brevi corymboso longioribus, pedunculis inferioribus ascendentibus bracteis quadruplò scapo triplò longioribus in fructu incurvis, sepalis petalisque dorso viridibus subconformibus oblongis obtusis, filamentis oblongis apiculatis alternis brevioribus æquilatis.

We are unable to trace this plant in the writings of Botanists. It approaches O. refractum and exscapum, but both those species have a white stripe in the middle of their leaves, which do not appear to be white edged. In the former, too, the flower-stalks are hardly longer than the bracts;

in the latter the leaves are described as linear, and the flower-stalks broken backwards when in fruit, neither of which are characters of the plant before us.

Its bulb had been gathered on the Asiatic side of the Bosphorus by a correspondent of the Honourable and Very Reverend the Dean of Manchester, who sent it to the garden of the Horticultural Society, where it flowered in a green-house in March 1844.

It is most probably quite hardy if planted in a rich sandy loam, and a situation dry during winter.

It flowers in March and April, attaining less than a foot in height, and like all such bulbs should be freely supplied with moisture during the growing season; but kept dry when in a dormant state.

CESTRUM aurantiăcum.

Orange-coloured Cestrum.

PENTANDRIA *MONOGYNIA.*

Nat. ord. SOLANACEÆ.

CESTRUM, L.

C. *aurantiacum;* glabrum, foliis petiolatis ovalibus acutis undulatis, floribus sessilibus spicatis, bracteis deciduis, calyce lucido quinquecostato quinquedentato, corollâ glabrâ infundibulari limbo reflexo, filamentis basi pubescentibus denticulo auctis, baccâ pyriformi candidâ.—*Lindl. in the Bot. Reg.* 1844. *misc. no.* 65.

In general the species of this genus have small claim to beauty, their flowers being for the most part green or greenish, or at least of some dingy colour; their only recommendation has been their occasional sweetness.

This plant, however, is one with a strikingly gay aspect, its apricot or orange-coloured blossoms being quite clear, and of considerable size for a Cestrum. It is in fact a very beautiful greenhouse shrub, and perhaps not unsuited for turning into the open border during summer. Its foliage too is dark green, shining, and abundant, and in the winter it is rendered gay by an abundance of snow-white pear-shaped berries.

Mr. Skinner presented the Horticultural Society with the seeds, which he had obtained from Chimalapa in Guatemala. It flowered in the Chiswick Garden in August, 1844.

The flowers are not only beautiful, but they last for a long time, and breathe a very pleasant perfume of orange-peel.

It is a greenhouse shrub which will grow freely in almost any sort of soil. Like many other greenhouse plants it requires to be placed out of doors for a few weeks in summer, when watering should be duly attended to. This will induce

the plant to form short jointed wood, and produce an abundance of flower-buds. After the flowering season, it will naturally lose all its leaves, but its large snow-white berries will still render it an attractive object. Being deciduous it requires very little water in winter, nor is it necessary to apply fire heat except to keep off frost. It may either be propagated from seeds or from cuttings, under ordinary treatment.

DYSOPHYLLA stellata.

Starry Dysophyll.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LAMIACEÆ.

DYSOPHYLLA, Blume. *Calyx* ovatus, æqualis, 5-dentatus, intùs fauce nuda. *Corolla* tubo incluso limbo quadrifido subæquali, lobo supremo integro v. emarginato, infimo subpatente. *Stamina* 4, exserta, recta v. vix declinata. *Filamenta* medio barbata. *Antheræ* terminales, uniloculares, rima transversali dehiscentes. *Stylus* apice subæqualiter bifidus, lobis subulatis, stigmatibus minutis terminalibus.——Herbæ. Folia *opposita v. verticillata.* Verticillastri *multiflori, in spicis terminalibus dense approximati v. imbricati.*—Benth. Lab. p. 156.

D. *stellata* (Benth. in Wall. Pl. As. rar. 1. 30.) ; glabra v. superne pubescens, caule repente, ramis erectis simpliciusculis, foliis 6-8 verticillatis anguste linearibus internodia subæquantibus integerrimis floralibus subulatis, calycis villosi ovati dentibus erectis acutiusculis.—*Benth. Lab. p.* 159.

Mentha quaternifolia, *Roth. nov. sp.* 256. ?

Herba *humilis, pusilla, facie Galii veri.* Caules *basi repentes, radicantes.* Rami *adscendentes v. erecti*, 3-6-*pollicares, basi glabri, sub spica pubescentes.* Folia *crebra, inferiora glabra, suprema sub spica pubescentia*, 2-3 *v. vix* 4 *lin. longa, linearia, acuta, margine integerrima, subrevoluta, basi subdilatata*, floralia *calycem sabæquantia.* Spica *densa*, 1-3-*pollicaris, villosa.* Calyx *fructifer parum elongatus.* Corolla *parva, purpurea, dente supremo emarginata.*—Bentham.

The Dysophylls are common in the warm parts of India, where they were originally regarded as Mints, an error which Dr. Blume was the first to correct. Mr. Bentham, however, includes them in the Menthid division, distinguishing the genus from Pogostemon by its more regular corolla. That part is indeed very little irregular, as will be seen by referring to the fig. 1 at the bottom of the accompanying plate.

The starry Dysophyll is mentioned by Botanists as inhabiting Malabar and Mysore. The specimen from which the figure was made flowered in the garden of the Right Honourable the Earl of Auckland in October last. It was a delicate little light green plant, looking something like a Bedstraw, but

more erect, and bearing spikes of the prettiest little purple blossoms, which remind the observer of the spikes of a Mimosa, or some such plant. The long tender filaments are directed downwards, and being covered with delicate hairs, produce the appearance of plumes of purple silk.

There is no hope, we fear, of this delicate little thing existing in the open air in England. On the contrary it must have a warm greenhouse all the year round.

All such plants should be potted in a light mixture, composed of sandy peat and a small portion of loam. They are increased by dividing the old plant early in spring, or by cuttings of the young shoots, putting them in sand in a close heat, and taking care that they do not suffer from excess of moisture.

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STANHOPEA Bucephălus.

Bull-horned Stanhopea.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ. § VANDEÆ—MAXILLARIDÆ.

STANHOPEA, Supra, fol. 1800.

S. *Bucephalus;* bracteis ovario subæqualibus, hypochilio unguiculato cymbiformi anticè intruso apice carnoso apertè sulcato mutico basi longè angustato ecorni intus lævi extùs bicarinato, epichilio subrotundo-ovato cuspidato integro breviore, cornubus gracilibus teretibus brevioribus, columnâ basi angustissimâ sursùm alatâ. *Supra, fol.* 1843. *sub t.* 44.
S. Bucephalus, *Lindl. Gen. & Sp. Orch. no.* 2.
Epidendrum grandiflorum, *Humb. & Bonpl. Pl. Æquinoct. p.* 94. *t.* 27.
Anguloa grandiflora, *Humb. Bonpl. & Kunth, Nov. gen. & sp.* 1. 345.

This is one of the rarest and finest of the Stanhopeas, in some measure resembling S. oculata, especially in the long narrow hypochil. Its flowers are deliciously scented, and their bright golden colour produces a very rich effect.

At first sight it might be mistaken for a mere variety of S. oculata, but Mr. Loddiges long since pointed out the shortness of its ovary as a decisive mark of distinction. The effect of this shortness is to make the inflorescence of S. Bucephalus very narrow, while in S. oculata it is broad and straggling.

The species is a native of the woods of Paccha, a small village in the Andes on the ascent from Guayaquil to Loxa, at an elevation of 6,000 feet above the level of the sea, where it was found by Mr. Hartweg. It first flowered in the garden of the Horticultural Society in August, 1843. Its stem is spotted as well as its blossoms.

It may either be potted in turfy heath-mould mixed with potsherds, in the usual way, or it may be suspended to a rafter, in a wire basket filled with sphagnum. It is a very free growing species, which will prosper under ordinary treat-

ment. During the growing season an ample supply of water should be given, and the house shaded in sunny weather. In summer the temperature should be kept about 80° or 85° by day, and about 70° at night. For a few weeks in winter, no more water should be given than keeps the pseudo-bulbs from shrivelling, when the temperature should never be raised above 65° with fire heat.

LUPĪNUS ramosissĭmus.

Branching Lupine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. § PAPILIONACEÆ.

LUPINUS, L.

L. *ramosissimus*, Bentham Pl. Hartw. ined.

This is a pretty, half-hardy, shrubby species, growing three or four feet high in any good garden soil, and well suited for cultivation in the open border, if treated as a summer annual. The seeds should be sown early in February, and afterwards potted singly; and when the danger of late spring frost is over, they should be planted out, where they will bloom freely from June to October.

The plant was raised in the garden of the Horticultural Society, from seeds collected by Mr. Hartweg on Chimborazo, at an elevation of 13,000 feet above the level of the sea.

The flowers smell like those of the Sweet Pea.

The name that is given it is as yet unpublished by Mr. Bentham; and as it will doubtless appear in some early number of the *Plantæ Hartwegianæ*, we forbear from attempting to frame for it a specific character. In fact, in so difficult a genus it would be impossible to do so in the absence of an accurate examination of the neighbouring species.

JASMĪNUM affine.

Kindred Jasmine.

DIANDRIA *MONOGYNIA*.

Nat. ord. JASMINACEÆ.

JASMINUM, L.

J. *affine ;* foliis oppositis imparipinnatis 2-3-jugis foliolis lateralibus ovatis acuminatis terminali duplo majore, floribus ternis terminalibus longè pedunculatis, calycis lobis subulatis, corollæ tubo calyce paulo longiore lobis oblongis obtusis acutisque.

J. affine, *Royle mss.*

Is this the wild officinal Jasmine? We suspect so. It differs in very little, and would under ordinary circumstances be looked on as a mere variety with pink-tubed flowers somewhat larger than usual. But it is a wild plant, having been raised in the Garden of the Horticultural Society from seeds sent from the north of India by Dr. Royle under the name here adopted. This much is certain, that it is quite capable of braving the climate of an English winter.

The native country of the common Jasmine is said to be the foot of Caucasus, whence it is supposed to have spread eastward; but the latter point is conjectural; unless this plant should establish its truth. In order to enable a judgment to be formed about it, an extract from Dr. Royle's Illustrations of the Himalayas is subjoined.

"The Jasmines are found in small numbers in tropical islands, in Africa and South America, as well as in China and New Holland; but in great numbers in the East Indies, whence they extend into Arabia and Persia, and from that to the South of Europe, where J. fruticosum is found, as well as J. odoratissimum, introduced from the island of Madeira. *J. officinale has become so naturalized in the gardens of England, that we cannot believe it, as generally supposed to be, a native of India; as we know no other instance where a shrub from the plains or southern parts of that country has become acclimated so far north; but the common name of the Jasmine in the languages of Europe indicates its origin from the Arabic name Yasmeen.* J. grandiflorum is the most nearly allied species, and this flourishes in the hottest parts of India: Dr. Wallich has, however, obtained specimens

from the mountains of Kemaon, which he has referred to this species, and which are very similar to some I have gathered in such mountains as Dhunoultee, Suen, Acharanda, Kedar-kanta, and Urrukta. These I have been in the habit of considering as J. officinale, as it is not usual to find the same shrub common in the plains and at 7000 and 8000 feet of elevation in 30° of N. latitude. The other mountain species are J. dispermum found in Nepal, Kemaon, and at Mussooree, and which I found in great abundance in descending from Bechur-bagh on the Suen range to the Giree river. The other mountain species are yellow-flowered, as J. pubigerum, Don, glandulosum, Wall., and chrysanthemoides, nob., as well as J. nanum, allied to J. humile, which descends from Mussooree to the Deyra Doon; in the latter are also found J. hirsutum and arborescens. The species most commonly cultivated in gardens are J. chrysanthemum and grandiflorum. J. laurifolium from Chirrapoonjee is highly ornamental, and J. Zambac is remarkable for frequently exhibiting several corols, one contained within the other, with the innermost only occasionally bearing stamens.

"Nyctanthes arbor tristis or Hursinghar, cultivated in every garden, with the native site of which Dr. Roxburgh expresses himself as acquainted, is extremely common along the foot of the mountains which skirt the Deyra Doon, and may be seen for several hundred feet above Rajpore in the ascent to Mussooree. I have also met with it further north on the Suen range in the descent to the Giree. Dr. Wallich also found it in a wild state near the banks of the Irrawaddy, on the hills near Prome; and as there can be no doubt about this species even to the most sceptical, it affords a very satisfactory instance of the extensive distribution of the same species along the base of the mountains, even when separated by 12° of latitude, or from 18° to 30°.

"The Jasmines like the Olives, though in a less degree, are possessed of a slight degree of bitterness in their leaves, but are conspicuous for their delicate fragrance, which is, however, of so evanescent a nature, as only to be fixed by the flowers being immersed in some of the finer of the expressed oils. The Hursinghar scents the gardens with its delightful perfume only during the night, covering the ground in the morning with its short-lived flowers, which being collected like those of the Chumbelee, are strung on threads and worn as necklaces, or entwined in the hair of the native women. The tubes of the corols are moreover dried and used for dyeing an orange colour."

ECHEVERIA Scheerii.

Mr. Scheer's Echeveria.

DECANDRIA *PENTAGYNIA*.

Nat. ord. CRASSULACEÆ.

ECHEVERIA, Supra vol. 24, *fol.* 1837.

E. *Scheerii;* caulescens, foliis ovalibus acutis in petiolum planum elongatis, floribus racemoso-paniculatis, racemis nutantibus, sepalis linearibus acutis corollâ brevioribus altero sæpiùs majore.

Although this is by no means so handsome a species as some of those already published in this work, it is far from being unworthy of cultivation. Its leaves are large and glaucous, and its flowers, notwithstanding their dingy colour, are abundant, tolerably large, and gracefully arranged.

For its introduction the public is indebted to Frederick Scheer, Esq. of Kew, a zealous collector of succulent plants, and whose name it will henceforward bear. It is a native of Mexico, whence seeds were received by that gentleman, and presented to the Horticultural Society in September, 1842. It flowers in the winter.

Like the rest of the genus it is a greenhouse plant, which should be potted in peat loam and silver sand in equal proportions. During the summer water should only be given every two or three days, for if too much is given the roots will damp off. From the end of October to the beginning of February very little water will be required, but air at all times when the weather is favourable. Fire heat is not necessary, except to keep off damp and frost. It is easily propagated either from seeds sown in the usual way, or from leaves laid on the surface of the soil.

Such leaves offer an interesting illustration of the manner in which the races of plants can be maintained by the agency of the foliage alone, even although accident prevents the formation of seeds.

Pub. by G. Ridgway

WARRĔA cyanĕa.

Blue-lipped Warrea.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ. § VANDEÆ—MAXILLARIDÆ.

WARREA, Lindl. ***Flores*** subglobosi, subregulares, mento brevi rotundato. ***Labellum*** continuum, indivisum, lineis elevatis carnosis in medium. ***Columna*** semiteres, clavata. ***Pollinia*** 4, per paria in caudiculam brevem linearem inserta, *glandulâ* triangulari.——Herba *terrestris, pseudobulbosa.* Folia *arundinacea.* Scapus *radicalis apice racemosus.* Flores *speciosi.*

W. cyanea, *Supra*, 1844. *misc. no.* 3.

When, in the year 1843, I proposed to establish a new genus upon the Maxillaria Warreana, it certainly did not occur to me that two new and quite distinct species would be added to it in the course of as many years. Such, however, has been the fact; in the beginning of 1844 this beautiful species blossomed with Messrs. Loddiges, and a few months since another appeared in the collection of Mr. Rucker. Both the latter are from the Spanish main, and it is not improbable that others may lurk in the unexamined forests of that vast region.

Warrea cyanea is remarkable for the intense porcelain-blue colour of its lip, to which it is not easy to find a parallel in the order; for pure blue is scarcely known among Orchids. The plant has quite the habit of Warrea tricolor, but is very much smaller in all its parts. Its most distinctive character is found in the form of its lip, which has a distinct point, and five ribs, not three, near the base. Messrs. Loddiges imported it from Colombia, and it is no. 860 of their last catalogue.

Being a terrestrial species this requires treatment very similar to Phaius maculatus. The soil best suited is turfy heath mould with a mixture of silver sand; nor is it necessary to have the soil elevated above the brim of the pot, for it will not succeed well if the roots are too much exposed. In

summer it requires an ample supply of water and a moist atmosphere, at a temperature of 80° or 85° by day, and about 70° at night. Like all Orchidaceous plants this should be kept rather dry in winter, and repotted in spring as soon as it shows any symptoms of growth. While in a dormant state the temperature should never be raised above 65° with fire heat.

It may be useful to bring together into one view the three species now known to exist. They are as follows :—

1. Warrea *tricolor* (Lindl. in Bot. Reg. 1843. misc. p. 14. *Maxill. Warreana*, Lodd. Bot. Cab. t. 1884. L. no. 30.); scapo multifloro foliis longiore, sepalis ovatis basi subæqualibus petalis minoribus conformibus, labello brevissimè unguiculato obovato-oblongo indiviso cucullato obtuso jugis tribus in medio elevatis carnosis, superficie laminæ seriatim corrugatâ marginibus planis.——*Brazil.* ——Sepals yellowish brown, lip yellow at base, pallid at the end, rich purple in the middle.

2. W. *cyanea* (Lindl. in Bot. Reg. 1844. no. 3.—1845. t. 28.); spicâ brevi, bracteis ovarii longitudine, sepalis ovatis acutis, petalis subconformibus, labello subrotundo-cuneato apiculato undulato lineis quinque elevatis.——*Colombia.* ——Very much smaller than the last, and conspicuous with its porcelain-blue lip.

3. W. *bidentata* (Lindl. in Bot. Reg. 1844. misc. 78.); bracteis pedicello 4-plo brevioribus, labelli apice bidentati venis valdè convexis flabellatis lamellis altis intermediâ duplò majore.——*Caraccas.*——Much like Warrea tricolor. Its lip is however regular, and slit at the end, the veins are much more convex, and the central plates thinner and deeper than in that species. The bracts too are not half the length.

GOODENIA grandiflora.

Ovate-leaved Goodenia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. GOODENIACEÆ.

GOODENIA, Sm.

G. *grandiflora*; herbacea erecta glanduloso-pubescens, ramis striato-angulatis, foliis inferioribus lyratis, rameis inferiorumque lobo terminali ovatis acutis dentatis, pedunculis trifidis trichotomis simplicibusve, calycis lobis linearibus acuminatis, stylo longitudinaliter lobato.—*DeCand. prodr.* 7. 514.

G grandiflora, *Sims Bot. mag. t.* 890. *Bonpl. jard. malm.* 16. *t.* 6. *Willd. enum.* 1. 219. *Brown prodr.* 5. 76.

G. appendiculata, *Jacq.*

This plant was raised in the Garden of the Horticultural Society, from among a parcel of seeds presented by Mr. Bidwill, and the packet was labelled in that gentleman's handwriting, "New Zealand." It is, however, beyond all doubt, the same as the Port Jackson plant, which was long since introduced to this country, but which seems to have been generally lost again. Are we then to conclude that G. grandiflora is common to both New Holland and New Zealand? or are we to suspect some error in the ticketing?

Be that as it may, it is certain that we have recovered a very pretty greenhouse perennial (not annual or biennial) well worth cultivating for the sake both of the gay appearance of the flowers and of their fragrance, which is that of orange bloom, only much less powerful.

It is of easy cultivation. It should be potted in rough sandy peat. In summer it requires a good supply of water and shading in sunny weather. Being a plant of rapid growth, it is necessary to give air at all times when weather will allow, otherwise it is apt to become drawn and unsightly. It is also a plant very easily multiplied from cuttings, which if struck in July or August will form large specimens the

following season. Such plants as this are very desirable; the young plants can be kept in small compass during winter, and in summer supply the places of hard-wooded plants which require to be set out of doors. Fire heat will only be required to keep off frost.

Miss Drake del.

Pubd by J. Ringaway 166 Piccadilly June 1. 1845

SCHOMBURGKIA tibicĭnis, *var.* grandiflora.

Large-flowered variety of the Trumpet Schomburgkia.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ=EPIDENDREÆ. § LÆLIADÆ, *Lindl. veg. kingd. p.* 181. (ined.)

SCHOMBURGKIA. Supra 1844. *t.* 23.

S. *tibicinis;* pseudobulbis conicis corniformibus annulatis sulcatis 3-phyllis, foliis oblongis coriaceis patentibus, scapo longissimo tereti distanter squamato apice paniculato, paniculâ pyramidali laxiflorâ, sepalis petalisque undulatis crispis, labello oblongo cucullato venis per medium 5 elevatis approximatis : laciniis lateralibus apice rotundatis intermediâ subrhombeâ emarginatâ, antherâ emarginatâ.—*Lindl. l. c.*

S. tibicinis, *Bateman Orch. Mex. & Guat. t.* 30.

Var.; grandiflora; floribus duplò majoribus labello extus pallido intus lobo medio luteo, albo v. violaceo-limbato.

That was a noble specimen from which the accompanying figure was taken,—the pseudobulbs being fifteen inches long, and the flowering stem five feet high. It was produced in the collection of Robert Hanbury, Esq. in May, 1844.

It is certainly the same species as that named by Mr. Bateman "tibicinis," because the hollow pseudobulbs are used as trumpets by the Indian children of Honduras; a scene in which they are so occupied forms the subject of one of the exquisite wood-cuts in Mr. Bateman's magnificent work.

But although the same species it is very different in the size and colour of the flowers, which are very much larger, far paler on the outside, and have a broader lip, whose middle lobe is not rich violet but yellow, with a white or purple border. In this instance the plant realises the expectations that had been formed of it: in other cases it has disappointed them.

It may either be tied to a block of wood and suspended to a rafter, or it may be potted in turfy heath-mould, mixed with potsherds, and treated in the same manner as Cattleyas.

During the growing season an ample supply of water should be given to its roots, but as little over head as possible, except in the form of vapour ; for water is apt to lodge in the axils of the leaves and cause the young ones to damp off. To prevent the leaves from being scorched in summer, as well as to keep the temperature about 80° by day, it will be necessary to use shading. In winter, for a few weeks, if the atmosphere is kept moist, very little water will be required, and then the temperature should not be raised above 60° by artificial means.

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CAJĀNUS bicŏlor.

Two-coloured Pigeon Pea.

DIADELPHIA *DECANDRIA*

Nat. ord. LEGUMINOSÆ. § PAPILIONACEÆ.

CAJANUS, DC. Calyx campanulatus, subbilabiatus, labiis subæquilongis, superiore breviter bifido, inferioris tripartiti laciniis lanceolato-subulatis, sursum curvatis, intermedia paullo longiore, omnibus apice recurvis. *Corollæ* papilionaceæ deciduæ petala æquilonga, vexillum latum, basi bicallosum, unguis marginibus reflexis, alæ rectæ, carina falcata. *Stamina* 10, filamento vexillari libero diadelpha, alterna breviora; antheræ conformes. *Ovarium* quadri-quinqueovulatum. *Stylus* adscendens inferne pilosus; *stigma* subpeltatum. *Legumen* lineari-lanceolatum, utrinque angustatum, compressum, tri-pentaspermum, lineis inter semina profundis obliquis torulosum, intus istmis membranaceis transversim pluriloculare. *Semina* subrotunda, subcompressa, umbilico lineari, estrophiolato.——Frutices *Asiæ tropicæ, in America culti, erecti pubescentes v. velutini;* foliis *pinnatim trifoliolatis,* foliolis *ovali-lanceolatis, mucronatis,* stipellis *breviter subulatis,* stipulis *lanceolatis,* racemis *axillaribus pedunculatis, corymbiformibus,* bracteis *oblongo-lanceolatis, caducis,* pedicellis *ex eadem bractea geminis,* floribus *flavis,* leguminibus *hirsuto-pubescentibus.*—Endl. gen. no. 6686.

C. *bicolor;* vexillo extus discolore, leguminibus 4-5-spermis maculatis, stipellis foliolorum lateralium petiolulo subæqualibus.—*DeCand. prodr.* 2. 406.

Cytisus Cajan, var. β, *Lam. diet.* 2. 249.

Cytisus pseudo-cajan, *Jacq. hort. vind.* 2. *t.* 119.

Cajanus indicus β, *Walpers Repertorium,* 1. 783.

The Pigeon pea, or Doll as it is called in the East Indies, is said to be so named because its seeds are the favourite food of wild pigeons; it is however extensively used by man, being cultivated very generally in both the East and West Indies.

In the opinion of some Botanists only one species exists, of which there are two varieties, the one with flowers entirely yellow, and two or three seeds in each pod, which is never spotted; the other with flowers streaked externally with crimson, and having four or five seeds in a pod, which is marbled with dark streaks. Others regard them as a distinct species. The first is called the No-Eye Pea in the West

Indies, and the latter the Congo Pea; it is what is now represented. The seeds were collected in the neighbourhood of the town of Jellalabad, whose glorious defence by a portion of the Indian army, under the command of Sir Robert Sale, will never be forgotten; they were presented to the Horticultural Society by Sir Henry Fletcher. In that establishment it is found to be a half hardy annual or biennial, growing about eighteen inches high, if planted in any good garden soil, and flowering freely from June to August.

The following remarks upon these species are extracted from Dr. Macfadyen's *Flora of Jamaica*, p. 297.

"The general appearance of both is very much alike, and they can scarcely, previous to flowering, be distinguished from one another, except that the leaves of the C. FLAVUS are rather smaller and finer to the touch.

"Of these two species the No-Eye Pea is the most delicate, being, in the green state, very little inferior to the English pea, and when dried and the cuticle removed, equal to the split peas we receive from Europe. The other species is coarser, and made use of principally by the Negroes, and requires, in the dried state, a tedious boiling process before the seeds can be softened.

"From the two species being frequently, through carelessness, planted close to one another, we may occasionally meet with hybrid varieties. When once established they stand for several years. The leaves are annually shed, and are reproduced with the flowers in the early months of Summer. The crop is gathered during the months of Autumn. No particular care or trouble is required in the cultivation of these shrubs, and they thrive in the poorest land. They are said indeed to improve the soil on which they grow, by the decay of the leaves, which are annually shed in great profusion. There are few tropical plants indeed so valuable. They are to be found round every cottage in the island, growing luxuriantly in the parched savannah, and mountain declivity, as well as in the more fertile and seasonable districts."

Fig. 1 represents the stamens; 2, a longitudinal section of the ovary; 3, a ripe pod.

Miss Drake del.

Pub by J Ridgway 169 Piccadilly June 1 184

ARCTOSTAPHŸLOS nitĭda.

Shining-leaved Bearberry.

DECANDRIA *MONOGYNIA.*

Nat. ord. ERICACEÆ.

ARCTOSTAPHYLOS, Adans. Calyx quinquepartitus. *Corolla* hypogyna, globoso-v. ovato-campanulata, limbo quinquefido, reflexo. *Stamina* 10, imæ corollæ inserta; *filamenta* brevia; *antheræ* a latere compressæ, dorso infra apicem affixæ et reflexo-biaristatæ, apice biporosæ. *Ovarium* disco hypogyno cinctum, quinqueloculare, loculis uniovulatis. *Stylus* simplex; *stigma* obtusum. *Drupa* subglobosa, pentapyrena, pyrenis osseis, monospermis. *Semina* inversa.——Frutices *v.* suffrutices, *in* Europa *media et boreali crescentes;* foliis *alternis*, racemis *terminalibus*, pedicellis *bracteatis*.—Endl. gen. no. 4327.

A. *nitida;* erecta, foliis breviter petiolatis oblongo-lanceolatis acutis argutè et inæqualiter cartilagineo-dentatis basi integerrimis angustatis utrinque ramisque glaberrimis suprà nitidis, racemis paniculato-ramosis, rachi pedicellisque hispidis, filamentis basi pilosis.—*Bentham Plantæ Hartweg. p.* 66. *no.* 483. *Bot. Reg.* 1840. *misc. no.* 69.

Mr. Hartweg found this shrub in Mexico, on the mountains called Carmen; but it was not raised from his seeds. The existence of the plant in our collections is owing to George Frederick Dickson, Esq., who obtained seeds of it from Mexico, for the Horticultural Society, in whose gardens the annexed drawing was made in May 1844. It usually flowers for a second time, in the autumn.

Mr. Bentham observes that it is near Arctostaphylos arguta, from which it principally differs in having branched hispid racemes. It forms a handsome evergreen shrub, five or six feet high, growing readily in any good loamy soil, and capable of enduring a mild winter in the open border. It would be a fine plant for the climate of Devonshire or Cornwall.

It is increased by seeds, or by budding on the common Arbutus.

Fig. 1 represents an ovary divided transversely, with one stamen standing on the left; 2, is the upper end of the style and the stigma; 3, is a perpendicular section of a ripe fruit; 4, is the ripe fruit itself; 5, its transverse section.

Miss Drake del.

Pub.by T. Ridgway 169 Piccadilly June 1. 1845

J. Basire sc.

SPIRÆA Lindleyāna.

Dr. Lindley's Spiræa.

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. **Rosaceæ. § Roseæ.**

SPIRÆA, L.

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§ Sorbaria *Seringe in DeCand. Prodr.* 2. 543.——Schizonotus, *Lindl. in Wall. Cat. no.* 703. Folia pinnata. Discus totus calyci accretus. Ovula plura pendula. Capsula 5-carpa ; carpellis per dorsum dehiscentibus.

S. *Lindleyana ;* fruticosa, foliis pinnatis 5-8-jugis, foliolis sessilibus ovato-lanceolatis acuminatis grossè duplicato-serratis, stipulis linearibus.

Spiræa Lindleyana ; *Wallich Cat. no.* 703. *Royle illustr. Himal. p.* 203.

The sorb-leaved Spiræa is well known as an inhabitant of shrubberies. The species now figured is very like it, differing chiefly in its greater stature, and more numerous leaflets, which have a long taper point, and a distinctly ovate outline, while those of Sp. sorbifolia are nearly oval.

It is a native of the Himalayas; Dr. Wallich's collectors found it in Kemaon and Sirmore ; and Dr. Royle also mentions it as inhabiting those countries. The specimen now figured was produced in the garden of the Horticultural Society, where it had been raised from seeds communicated by the Honourable Court of Directors of the East India Company.

It is a fine tall shrub, growing freely along with similar plants, and flowering abundantly from July to September. During three winters it bore the cold without suffering : but the late winter killed it as far as the ground, from which, however, it is again shooting up.

Miss Drake del.

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LYCASTE gigantea.

Large-flowered Lycaste.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § VANDEÆ—MAXILLARIDÆ.

LYCASTE. Supra, vol. for 1843. *fol.* 35.

L. *gigantea;* bracteâ herbaceâ sepalis subæquali, sepalis oblongo-lanceolatis lateralibus falcatis, petalis conformibus paulò minoribus, labello lanceolato acuminato laciniis lateralibus acutis intermediâ ovatâ acuminatâ (obtusâ) serratâ, appendice carnoso emarginato.—*Lindl. in Bot. Reg.* 1843. *misc.* 16.

Maxillaria Heynderycxii, *Morren in Annales de la Société Royale d'Agriculture et de Botanique de Gand. vol.* 1. *t.* 9.

Although the colours of this species are not gay, yet its large size and the great height to which its flowering stem rises (full two feet), are remarkable features; besides which its flowers are among the largest in the race of Orchids.

Mr. Hartweg found it in Guayaquil, flowering in the month of August, at a place called the Quebrada de las Juntas; and from his dried specimens it was described in this work in the year 1843. The solitary flower, however, which we examined had a labellum very much drawn to a point; but the specimens which have been produced in our stoves had that part abruptly rounded off, as is shewn in the annexed plate (fig. 1.); and the former therefore was perhaps some accidental form. This is the more probable, since the species has also flowered in Belgium, whither it had been introduced from La Guayra.

M. Morren, who called it Maxillaria Heynderycxii "after Senator Heynderycx, vice-president of the Royal Agricultural and Botanical Society of Ghent," was apparently unacquainted with the enumeration of Lycastes published in this work in the year 1843.

It should be potted in turfy heath-mould mixed with potsherds. To prevent the water from becoming stagnant

about its roots the pot should be well drained, and the soil considerably elevated above its brim. In summer, while the plant is growing, plenty of water should be given to its roots, and it must be syringed over head once or twice a day. Like many other Orchids this requires a humid atmosphere, and a shade in sunny weather. During the season of growth the temperature should be kept about 80° by day, and about 70° at night. In winter, the season of rest, very little water will be required for a few weeks, nor is it necessary to raise the temperature above 66°, with fire heat.

Miss Drake del.

J. Barclay Sc

IRIS imbricāta.

Imbricated Iris.

TRIANDRIA *MONOGYNIA*.

Nat. ord. IRIDACEÆ.

IRIS. L.

I. *imbricata*; foliis latis rigidis erectis scapo subramoso brevioribus, bracteis ovatis obtusis distichis foliaceis apice membranaceis arctè imbricatis, sepalis barbatis apice rotundatis, petalis obovatis emarginatis, perianthii tubo brevissimo.

This is a very showy perennial, which most probably will prove quite hardy in the open border, if planted in a rich sandy loam and warm situation. It is increased by dividing the old plants any time from October to March, and flowers about the end of May.

Our specimens were forwarded in May, 1844, from Spofforth by the Hon. and Very Rev. the Dean of Manchester. With the history of the plant we are unacquainted.

It is probable that it is a mere variety of I. squalens; from which it differs in its pure lemon-coloured flowers, and in the imbricated short blunt convex bracts which invest their base.

Miss Drake del

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ODONTOGLOSSUM Cervantesii.

Cervantes' Tooth-tongue.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ. § VANDEÆ—BRASSIDÆ. *Lindley's Vegetable Kingdom, p.* 181. *ined.*

ODONTOGLOSSUM, Bot. Reg. vol. 1839. *t.* 48.

O. *Cervantesii;* pseudobulbis ovatis angulatis, foliis solitariis oblongis in petiolum canaliculatum angustatis, scapo paucifloro, bracteis vaginisque membranaceis acutissimis equitantibus elongatis, sepalis membranaceis oblongo-lanceolatis acutis, petalis latioribus subunguiculatis acutis, labello subcordato-ovato acuto unguiculato ungue carnoso cyathiformi pubescente antice bidentato medio tuberculato processubus 2 pilosis ante cyathum, columnæ pubescentis auriculis rotundatis.

Of the beautiful things belonging to the white-lipped section of this genus not one is more perfectly lovely than that which is now figured from a specimen communicated last February from Messrs. Loddiges, who imported it from Oaxaca. It is the No. 1613 of their catalogue, and in the way of the well-known O. Rossii; but its large thin delicately pink flowers, banded with crimson near the centre, are in all respects much handsomer.

Among other valuable attributes the plant has that of being very sweet-scented, emitting a delicious odour something like bitter almonds.

Although it has just been compared with O. Rossii, yet in truth it is much more like O. membranaceum, (the No. 1614* of Messrs. Loddiges' catalogue,) a plant found at Oaxaca by Count Karwinski, and also in the great Hackney collection. That plant, however, has perfectly white flowers, with the exception of concentric broken crimson bands which occupy the lower part of all the segments of the flower; its petals and lip are very blunt, and the latter is very deeply heartshaped; while in O. Cervantesii on the other hand the lip is scarcely heartshaped, and has no band-like markings;

it and the petals are particularly acute, and the ground tint of the flower is a delicate flesh colour. The teeth, too, which stand in front of the saucer-shaped stalk of the lip, are longer in the latter species.

In no respect does it appear to differ from the plant described by La Llave under the name of O. Cervantesii, except in its lip not being somewhat lacerated. It is however probable that the slight undulations of the lip are what the Mexican Botanist called lacerations.

It should be potted in turfy heath-mould in the same way that Orchidaceous plants generally are. In summer an ample supply of water should be given, and the temperature kept up to about 80° by day and about 70° at night. In autumn as the pseudo-bulbs become matured, water should gradually be withheld, and for a few weeks in winter little or none will be required, providing the house can be filled with steam for about half an hour every fine day. Although many plants in this order succeed well on blocks of wood, without any soil whatever, still those under pot culture are much benefited by having it renewed every season; this should be done early in spring when the plants begin to grow.

2 1 2 3 4 5 6 7 8

W. Hanbord del.

CROCI autumnales.

Autumnal Crocuses.

TRIANDRIA *MONOGYNIA.*

Nat. ord. IRIDACEÆ.

CROCUS. Bot. Reg. 1843. *fol.* 21.

1. C. *Damascenus*, Herbert ; c. tun. vagin. fugacibus basi radiatè persistente, foliac. interiore tenuiter reticulatâ prope fundum affixâ, cæteris in vertice, scapo nudo, spathâ brevi bracteatâ, tubo ultra unc. exserto, limbo griseo-cœrulescente, fauce lævi, sepalis extus plumeo-tristriatis. *Consulas pleniùs huj. vol. misc. p.* 1.
2. C. *Byzantinus*, Parkinson Par. 168. Ker, Bot. Mag. 1111. p. 2. A.D. 1808. *C. Banaticus*, Gay, B. F. 25. 220. A.D. 1821. *C. speciosus*, Reich. Ic. B. C. 10. *C. iridiflorus*, Heuffel et Rch. ; c. tun. paucis reticulatis, scapo involucrato, spathâ longè exsertâ subbiflorâ, tubo sesquiunciam libero, sepalis biuncialibus $\frac{3}{4}$ unc. latis purpureis, petalis valde brevioribus pallidis $\frac{1}{4}$ unc. latis stigmata multifida non æquantibus antheras parum superantibus, foliis hysteranthiis. *Ex specim. sicco Gayano. Consulas pleniùs misc. supra* 1843. *p.* 32.
3. C. *Tournefortianus*, Gay, B. F. 25. 220. ; c. tun. membran. mollibus badiis, scapo nudo, spathâ bracteatâ, limbo subalbo violascente fauce lævi pallidâ, antheris albis, stigmatibus multifidis, foliis lævibus proteranthiis. *Consulas pleniùs huj vol. misc. p.* 6.
4. C. *Cambessedianus*, Gay, B. F. 15. 220. ; c. tun. lævibus, foliis angustis synanthiis florem æquantibus, limbo vix $\frac{3}{4}$ unc. longis albidis sepalis plumeo-tristriatis. *Ex Majorca. Consulas misc. supra* 1843. *p.* 33.
5. C. *medius*, Balbi. Bot. Mag. 3871. p. 4. Bertol. Desc. 9. Gay B. F. 1827. p. 8 et 29. ; c. tun. retic. scapo involucrato, spathâ longè exsertâ subviridescente ebracteatâ, tubo prælongo exserto purpurascente, sepalis ultra sesquiuncialibus purpureis, petalis valde brevioribus purpureis ad basim extus 5-striatis, antheris luteis, stigmatibus multifidis, foliis lævibus hysteranthiis. *Ex mont. Liguriæ. Cons. supra m.* 1843. *p.* 34, *et* 1844. *p.* 37.
6. C. *Cartwrightianus*, Herbert ; supra 1843. 3. *Var.* 2 *et* 3, *ex ins. Teno et Seyro*
7. C. *Cartwrightianus*, var. *Creticus ;* c. tun. colore magis badio, seriùs florens, sepalis extus substramineis. *Ex "Caneæ" in Cretâ vicinià.*
8. C. *Clusianus*, Gay, B. F. 25. 220. Supra misc. 1843. p. 32. ; c tun. vagin. basi fibrillosâ persistentibus, foliaceis retic. circ. $\frac{3}{8}$ unc. apiculatis, scapo involucrato, spathâ $\frac{3}{4}$ unc. libera bracteam tubum involventem æquante, tubo $\frac{1}{4}$ unc. vel ultra libero fauce lævi extus pallidè livido-lutescens, limbo circiter unciali violaceo, filamentis albis circ. $\frac{1}{4}$, antheris luteis $\frac{1}{2}$ unc. stigmata æquantibus, stylo subcoccineo 3-4-fido stigmatibus multifidis, foliis lævibus florendi tempore semilineam circiter latis unciam vel ultra exsertis. *In cretaceis prope Olissiponem.*—W. H.

Fig. 1. A full account of C. Damascenus is given in the first page of the miscellaneous matter in this volume.

Fig. 2. C. Byzantinus flowers without leaves in September

and October in the woods of Bannat, and the neighbourhood of Crajova in Wallachia. It was cultivated in England two hundred years ago by Parkinson, who had also C. reticulatus v. albicans which inhabits the steppes near Bucharest, in Wallachia, as well as S. Podolia and the vicinity of Odessa, and is called by him Cloth of Silver Crocus. He probably obtained both by way of Constantinople from Wallachia, but both have been long lost in this country. I have lately received reticulatus albicans from Odessa, and Bucharest. C. Byzantinus is very remarkable from the smallness of its petals compared with the sepals. The outline is taken from a dry specimen kindly lent me by Monsieur Gay. I have as yet failed in my attempts to obtain the living plant.

Fig. 3. C. Tournefortianus is described in the misc. of this volume at p. 6. It is remarkable by its milk-white anthers. Crocus Ionicus of Corfu has similar bulbcoats, and is allied to it.

Fig. 4. C. Cambessedianus is a singular little autumnal Crocus peculiar to Majorca, kindly communicated to me by Monsieur Gay, by whom it was named.

Fig. 5. C. Medius grows in the mountain meadows near Varese in Liguria, and some parts of the Riviera of Genoa. It was named by Balbi, as intermediate between Sativus and Pyrenæus, but it is in fact a link between Byzantinus and Pyrenæus.

Fig. 6. Concerning C. Cartwrightianus consult misc. of this volume, p. 4; concerning C. Clusianus, p. 7.

Fig. 7. I can now add concerning *Crocus Ionicus*, cormi tunicas C. Tournefortiano conformes, foliis valdè angustis; and concerning *Crocus Gargaricus*, var. *panchrysus*, limbo brevi obtuso saturatè aureo non striato, foliis 4-5 hysteranthiis.

The anthers of C. Gargaricus differ from those of all the varieties of C. lagenæflorus. C. lagenæflorus antheris superne attenuatis divaricantibus, C. Gargaricus antheris superne non attenuatis suberectis. I failed of obtaining the citron-coloured plant of Dr. Clarke's herbarium, of which the flower is accompanied by the leaves, and is probably later than the Golden. Mr. Lander, who kindly procured for me the Golden C. Gargaricus, and some other bulbs from Mt. Gargarus, visited it earlier in the spring than Dr. Clarke, and missed C. Candidus also.

RHUS diversiloba.

Various-leaved Poison Oak.

POLYGAMIA *MONŒCIA*.

Nat. ord. ANACARDIACEÆ.

RHUS. L.

R. *diversiloba ;* subglabra, caule vix scandente ramuloso, foliis 3-5-foliolatis, foliolis obtusissimis in fœmineo sublobatis masculo subpinnatifidis, lobis obtusissimis acute incisis, paniculis axillaribus racemosis, drupis subglobosis.—*Torrey & Gray, fl. of N. Amer. ex angl. ver.*

R. lobata, *Hooker Fl. Bor. Am* 1. 127. *t.* 46. *&c.*

This shrub was brought from California by R. B. Hinds, Esq. who found it in that country. The country people call it Yeara, and say that it poisons on contact, or even through the air ; in which respect it resembles the common Poison Oak, R. Toxicodendron, to which it is nearly allied.

Indeed, it is so like that species, that if it were not for an upright unscrambling habit, and very blunt leaflets, it might be looked upon as a mere variety.

Mr. Hinds says that the bush was common everywhere in California, but that he never witnessed any bad effects from it.

In gardens it proves to be a hardy deciduous shrub or small tree, growing rather upright. It pushes freely in any kind of soil, which is not very poor or dry, and is easily increased by seeds and layers. It flowers abundantly in June.

It has stood last winter against the arboretum wall, in the garden of the Horticultural Society, without being in the least injured.

Miss Drake del.

Pub.d by J. Ridgway 169 Piccadilly July 1 1845

T. Bradbury sc.

ORNITHOGALUM nanum.

Dwarf Star of Bethlehem.

HEXANDRIA *MONOGYNIA.*

Nat. ord. LILIACEÆ. § ASPHODELEÆ.
ORNITHOGALUM. L.

O. *nanum ;* foliis linearibus canaliculatis patulis glabris corymbo longioribus, corymbo breviter pedunculato patulo, pedicellis post inflorescentiam refractis, bracteis ovalibus pedicellis duplò brevioribus, filamentis subulatis erectis alternis majoribus, ovario 3-lobo.

O nanum, *Sibth. Fl. Græc.* 4. 28. *t.* 332. *Tenore Sylloge app.* 4. *p.* 13. *Kunth. enum.* 4. 365.

This is certainly very distinct from any of the genus otherwise in cultivation ; its stiff narrow leaves, and short-stalked dwarf corymbs offering characters not to be mistaken. Yet Bieberstein suggests its being only an early variety of O. umbellatum, a conjecture to which we cannot assent.

A pretty little hardy bulb which grows freely in very rich sandy loam, and flowers in March. It is easily increased by seeds, or by dividing the old bulbs when in a dormant state.

It was received from the Hon. and Very Rev. the Dean of Manchester, and is said to have been gathered in marshy meadows at Berbeck, near Constantinople. According to Sibthorp it occurs in dry hills in Arcadia, and about Abydos, and this may account for the very different appearance of the plant of the Flora Græca, which, if the same as this, is in a starved condition.

Mrs I. Forke del. Pub by J Ridgway 169 Piccadilly June 1. 1845 C Bauer sc.

ONCIDIUM spilopterum.

Spot-winged Oncidium.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § VANDEÆ—BRASSIDÆ. *Vegetable Kingdom, p.* 181. *ined.*

ONCIDIUM, Swartz.

Sect. II. EUONCIDIUM.

†† Sepala v. petala basi angustata.

* Folia plana.

‡‡ *Pentapetala*; sepalis lateralibus omnino disjunctis.

¶¶ *Micropetala*; petalis sepalis lateralibus subæqualibus et similibus.

☞☞ *Labellum panduratum*; i. e. medio constrictum basi angustius.

O. *spilopterum* (Lindl in Bot. Reg. 1844. misc. 76); pseudobulbis compressis oblongis diphyllis, foliis erectis oblongis scapo erecto racemoso brevioribus, sepalis ovatis acutis liberis, petalis conformibus latioribus, labello maximo trilobo subrotundo emarginato apiculato lobis lateralibus nanis obtusis, cristâ anticè trilobâ jugis quibusdam verrucisque utrinque pone basin quasi 5-lobâ, columnæ alis semicordatis crenulatis maculatis.

O. gallopavinum, *Morren in Ann. Soc. Hort. Gand.* 1. 13.

We have to thank Mr. Loddiges for specimens of this plant, and also for pointing out its identity with Prof. Morren's O. gallopavinum. It had been previously described in the miscellaneous matter of this work as a native of Brazil, and it probably was this circumstance which prevented the learned professor at Liège from identifying his plant with ours. Prof. Morren says that it comes from Mexico; and Messrs. Loddiges informs us that their statement of Brazil being its habitat was made on the authority of a correspondent, the plant not having been imported by themselves.

It is really a beautiful species, in an artificial arrangement seeming to be intermediate between O. Lanceanum and carthaginense, but naturally standing near O. reflexum and the Mexican species allied to it. Its flowers are large and yellow, with small brownish purple sepals and petals; the base of the labellum is the same colour; while the wings of

the column are clear yellow, spotted with crimson. The flowers grow in an erect raceme, longer than the leaves.

Fig. 1. is a magnified view of the column and base of the lip, shewing the wings of the former, and the peculiar nature of the tubercles that form the crest of the latter.

It should be grown in turfy heath-mould, mixed with pot-sherds. The pot in which it is grown should be well drained, and the soil considerably elevated above its brim. During the summer months when a humid atmosphere is necessary an ample supply of water should be given, and the house shaded in sunny weather, which will regulate the temperature without admitting much air. In winter, while the plant is in a state of rest, and the temperature kept about 60° or 65° by fire heat, little water will be required for a few weeks; but as soon as it begins to grow it should be repotted and the heat and moisture gradually increased.

FUCHSIA serratifolia.

Saw-leaved Fuchsia.

OCTANDRIA *MONOGYNIA.*

Nat. ord. ONAGRACEÆ.

FUCHSIA. L.

F. *serratifolia;* foliis ternis quaternisque ovato-lanceolatis dentatis glabris, floribus solitariis axillaribus, tubo calycis basi inflato limbo duplò longiore, petalis ovatis staminibus subæqualibus sepalis brevioribus, stigmate capitato ovato quadrilobo.

F. serratifolia, *Ruiz & Pav. Fl. Peruv.* 3. *p.* 86. *t.* 323. f. *a.* *DeCand. Prodr.* 3. 39.

Nothing attracted the attention of the visitors at the last meeting of the Horticultural Society more strongly, than a very fine plant of this beautiful new Fuchsia, which seems likely to surpass all that have been yet imported.

It has a noble aspect. The large leaves are of a deep rich indigo green, the effect of which is greatly heightened by the gay rose colour of their stalks and midrib. The flowers are between two and three inches long, of a very deep clear rose colour, most intense at the bottom, becoming paler upwards, and at last melting into a delicate green at the ends of the sepals. The petals are of the most vivid vermilion. Although the flowers appear singly from the axils of the leaves, yet their size is such as to render them very conspicuous objects, and moreover it appears probable that every leaf will produce its flower, all over the branches.

For its introduction from Peru the country is indebted to the enterprise of Messrs. Veitch of Exeter, by whom it was exhibited, and to whom we owe the branch from which this figure has been prepared. We have a specimen out of Dombey's herbarium, without a locality; but, according to the Flora Peruviana, it grows in damp and shady places at a place called Muña, where it forms a shrub two or three ells

high, and not much branched. The berries are said to be oblong, purplish, and about an inch in length.

This very handsome robust shrub requires the same kind of treatment as Fuchsia fulgens, and like the other kinds demands a rich soil, composed of sandy loam and leaf-mould, or well decomposed cow-dung, and plenty of pot room and moisture during the growing season, if it is to become a large and handsome object. After flowering, and in the autumn, the plants should be kept nearly dry; they may even be placed during the winter in a dry cellar, or other such place where they are secured from frost, until the following April.

No doubt it will strike freely from cuttings of the half-ripened shoots, treated in the ordinary way, any time when such can be procured.

It seems disposed to flower during all the summer and autumn.

ACHIMENES picta.

Painted Achimenes.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. GESNERACEÆ.—GESNERADS, *Lindl. Veg. Kingdom, ined.*

ACHIMENES. Supra, vol. 1842. *fol.* 31.

A. *picta ;* tota hirsuta, foliis oppositis ternisque cordato-ovatis grossè serratis velutino-hirsutis elegantissimè albopictis, pedunculis solitariis v. binis axillaribus folio longioribus unifloris, calycis tubo turbinato laciniis ovatis patentibus, corollæ tubo infundibuliformi limbi lobis rotundatis patentibus subæqualibus 3 inferioribus minoribus, ovario hirsuto vix calyce adnato, glandulis hypogynis 5.—*Hook. Bot. Mag. t.* 4126.

Achimenes picta, *Bentham MSS. Hartweg in Hort. Trans. n. s.* 3. 161. *t.* 3.

This beautiful thing, which is already becoming familiar to the cultivators of stove plants, was introduced from New Grenada (not Mexico) by the Horticultural Society, who have largely distributed it. Mr. Hartweg, who found it, speaks thus of its discovery.

Ascending the wooded heights on the east of Guaduas, I found in a forest of Wax Palms (*Ceroxylon andicola*) the Gustavia speciosa, Caliphruria Hartwegiana (a bulbous plant with white flowers), Peristeria elata, and Achimenes picta. In its native place this Achimenes prefers dry rocky ground, in places not much shaded, where it scarcely grows more than five inches in height, seldom producing more than two of its finely mottled bright orange flowers upon a stem.

The blossoms are certainly very handsome ; but the foliage is perhaps the most beautiful part, on account of the distinct bands of pale whitish blue upon a ground of velvet of the blackest green.

It is a stove plant, and must be grown in sandy peat. Like all the other species of Achimenes, this succeeds best in a shallow pot or pan ; but in whatever way it is grown, plenty of drainage is necessary. It will not survive long, if

stagnant water is allowed to remain about its roots. It is a plant of easy cultivation, and one which can be made to flower at any season of the year. A moist atmosphere is essential to its health, with a temperature of about 75° by day, while in a growing state. When in a state of rest, it should be kept quite dry. It is easily multiplied by cuttings or leaves, or by dividing the tubers which it forms at the roots.

The accompanying figure was made in the garden of the Horticultural Society.

TASMÀNNIA aromatica.

Aromatic Tasmannia.

POLYGAMIA *MONŒCIA.*

Nat. ord. MAGNOLIACEÆ.

TASMANNIA, R. Br. Flores dioici v. polygami. *Calyx* diphyllus, foliolis planis, deciduis. *Corollæ* petala 2-5, hypogyna, patentia, decidua. *Stamina* plurima, hypogyna; filamenta crassiuscula, teretia; *antheræ* biloculares, loculis ovatis, extrorsum adnatis, longitudinaliter dehiscentibus. *Ovarium* unicum, rarissime duo, libera, subsessilia, ovulis ad suturam ventralem plurimis, biseriatis, subhorizontalibus, anatropis. *Stigma* subterminale, introrsum decurrens. *Fructus* membranaceus indehiscens. *Semina* plura, pendula, ovata, subcurvata, testa nitida, fragili. *Embryo* in basi albuminis carnosi minutus, orthotropus, radicula supera.——Frutices *glaberrimi, in Nova-Zeelandia, insula Diemen et Nova Hollandia orientali monticoli;* cortice *aromatico,* foliis *sparsis sempervirentibus, pellucido-punctatis, breve petiolatis, integerrimis,* pedicellis *ad apices ramorum v. e summorum foliorum axillis confertis, unifloris, folio brevioribus, gracilibus, teretiusculis,* squamis gemmularum *convolutis, acuminatis, ramulos novellos terminantibus, deciduis.* Endl. gen. no. 4741.

T. *aromatica;* foliis oblongis basi in petiolum sensim attenuatis, fructibus globosis subdidymis.—*R. Brown in DC. Syst.* 1. 445. *Delessert. ic.* 1. *t.* 84.

Sepala 3, *ovata, pellucido-punctata, basi connata, acuta, concava, imbricata.* Petala 6, *duplici serie, imbricata, obtusa, quorum* exteriora *obovato-oblonga, latiora,* interiora *lineari-oblonga.* Carpellum *solitarium nunc in medio staminum; sed flores sæpius omninò masculi. Nunc pars altera additur, et corollæ octopetalæ fiunt.*

This plant was first made known in DeCandolle's "System," where it was described from specimens gathered on the mountains of Van Diemen's Land by Brown, and in the country round D'Entrecasteaux' channel by Leschenault, a French traveller. But at that time nothing was known of the flowers, except that they were diœcious. At a much more recent period the more extended character quoted above was furnished by Endlicher, who describes the flowers as being composed of two flat deciduous sepals, and from two to five petals. Such is certainly not the structure of Tas-

mannia aromatica, whose sepals are three, and very concave, and the petals six in two rings, or occasionally eight, in consequence of the addition of one petal to each ring. Endlicher's character cannot then have been taken from T. aromatica, but possibly belongs to T. dipetala, which perhaps does not belong to the genus.

The species is a handsome evergreen bush, with dull purple branches, and light green leaves, distinctly marked with transparent dots; they are of a dead green and veinless on the underside. Mr. Gunn informs us that it is very abundant in Van Diemen's Land. "Between Burghley (at the Surrey Hills) and May Day Plain, the Van Diemen's Land Company's track, commonly called road, to Launceston, is cut through a thicket of it for upwards of a mile; at that place its usual height is from nine to twelve feet. It always grows in the richest humid soil; in the neighbourhood of Launceston, usually on the margins of rivers or small streams in umbrageous ravines. Every part of the plant is highly aromatic and pungent to the taste. The fruit is occasionally used as pepper."

In fact it is nearly related to the aromatic Winters bark, Drimys Winteri; from which its unisexual flowers and solitary carpels chiefly distinguish it; and it must follow the affinity of that plant. For this reason it seems necessary to associate it with the order of Magnoliads rather than with that of *Kadsurads (Schizandraceæ) or Anonads.

These three orders are generally distinguished by the following characters. Magnoliads are bisexual, have stipules of large size, and their flowers have an imbricated æstivation. Kadsurads resemble them in all things, except the want of stipules, and their flowers being absolutely unisexual. Anonads are bisexual like Magnoliads, but they have no stipules, their corolla is valvate, and their albumen ruminate. Moreover Magnoliads are astringent subaromatic trees or bushes; Anonads are similar in quality, but they are more aromatic; Kadsurads are scrambling plants with no aroma. It is a question of some interest to determine to

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* *Vegetable Kingdom, ined. p.* 305.

which of these Tasmannia really belongs. If we regard its aromatic quality it will belong to either Magnoliads or Anonads; but from the former it differs in the want of stipules, from the latter in its imbricated corolla, and from both in its unisexual flowers. On the other hand it has the unisexual flowers of Kadsurads, but not their habit, nor their mucilaginous qualities. Its unisexual flowers however point strongly in the direction of Kadsurads; but then it is not separable from Drimys, which is bisexual, and moreover its own flowers are in reality in many cases furnished with a central carpel: the two first flowers taken off one of Mr. Gunn's specimens proved in fact to be in that condition. Tasmannia must then be regarded as having a manifest tendency towards hermaphroditism, while no such attribute is known among Kadsurads.

For these reasons it will be stationed along with Drimys among bisexual natural orders; and then will necessarily fall into the ranks of Magnoliads: for its imbricated corolla and homogeneous albumen are at variance with the most essential peculiarity of Anonads. It, however, like Drimys itself, wants the stipules of Magnoliads, in which respect it is exceptional to the usual character of that natural order, and must be regarded as a genus stationed on the frontier between Kadsurads and Magnoliads.

It is a hardy greenhouse evergreen shrub, grows freely in a mixture of sandy loam and peat, and only requires to be kept free from frost. It flowers freely in April, and is easily increased by cuttings put in sand and covered with a bell glass, and placed where there is a gentle bottom heat.

Our drawing was made in the garden of the Horticultural Society, to which it was presented by Mr. Low of Clapton.

Pub.d by T. Richardson 169 Piccadilly Aug.t 1845

BOLBOPHYLLUM umbellatum.

Umbelled Bolbophyl.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § MALAXEÆ—DENDROBIDÆ. *Lindley's Vegetable Kingdom, p.* 181. *ined.*

BOLBOPHYLLUM, Thouars.

B. *umbellatum* (Lindl. in Wall. Cat. no. 1984. Gen. & Sp. Orch. no. 43); rhizomate repente, pseudo-bulbis oblongis angulatis, foliis solitariis oblongis loratis obtusis subemarginatis, scapis foliis æqualibus, floribus umbellatis, sepalis lateralibus obliquis falcatis obtusis majoribus supremo rotundato nano, petalis ovatis obtusis, labello cordato ovato complicato integerrimo emarginato, columnâ marginatâ setis duabus hinc unidentatis auctâ, polliniis 4 reniformibus posticis minimis muco apice cohærentibus.

The mountains of India yield this little Bolbophyl. Dr. Wallich's collectors found it in Nepal in 1821; it was one of the plants collected in the Khasiya hills, by Mr. Gibson, for his Grace the Duke of Devonshire, and flowered at Chatsworth in 1838; and now has been reintroduced by Messrs. Loddiges, with whom our drawing was made in September, 1844.

The pale straw-coloured flowers spotted with purple, are rather large, and for a Bolbophyl, pretty. The column has two long horns, which have had a single tooth on the upper side in all the specimens we have examined. The pollen-masses are, as is customary in the genus, of very unequal size, the front pair almost concealing that behind; and in this case are held together by some soft mucus, which resembles the gland of the Vandeous Orchids, but is destitute of its firmness and permanency.

Like many others of the same genus this species may either be potted in turfy heath-mould in the usual way, or it may be tied to a block of wood and suspended to the rafter. It is a stove plant which requires a humid atmosphere, and

an ample supply of water during the growing season. Instead of giving air in summer to regulate the temperature, shading should be used, which will also prevent the leaves from being scorched by the sun. In winter, the season of rest, little or no water will be required for a few weeks, provided the house can be filled with steam for half an hour every fine day.

Fig. 1, represents the column and lip seen from the side; 2, the lip seen from above; 3, the pollen-masses with the connecting mucus.

Miss Drake del.

Pub by J. Ridgway, 169 Piccadilly Aug. 1 1840

CALLIPSYCHE eucrosioides.

Two-coloured Fairy bloom.

HEXANDRIA *MONOGYNIA*.

Nat. ord. AMARYLLIDACEÆ.

CALLIPSYCHE. Flores declinati a latere compressi. *Sepala & Petala* in tubum brevem connata, regularia. *Sepala* cymbiformia petalis latiora, apice subreflexa; petalo imo depresso genitalia amplexo. *Filamenta* libera, basi tuberculo munita, ori tubi inserta, teretia, prælonga; *antheræ* versatiles, medio affixæ. *Ovarium* 3-loculare, ovulis plurimis biseriatis; *stylus* cum filamentis primum deflexus mox sursùm curvatus; *stigma* capitatum.—*Herbert in Bot. Reg.* 1842. *misc. no.* 49.

C. eucrosioides, *Herbert, l. c.*

This very curious bulb is only known to us from the preceding character, a specimen without leaves sent us from Spofforth in April 1844, and now figured, and a short Latin description published in the place above quoted.

The Dean of Manchester states that it is a plant with a roundish bulb, which was brought from St. Blas or S. Felipe on the west coast of Mexico, and that a similar plant, from Guatemala, is in his collection. It seems to like shade and heat, and flowered without leaves in the month of March.

Mr. Herbert thus describes the plant. "Leaves few in number, green, with a blade a foot long, and about four inches wide, a good deal tessellated and pitted. The scape with ten flowers, glaucous, tapering, smaller upwards, about 28 inches long. Spathe and bracts withering. Peduncles green, equal, about an inch long. Ovary oblong, 3-cornered, with 3 furrows, green; cells with about 23 ovules in each. Tube green, curved downwards, scarcely $\frac{1}{4}$-inch long, full of honey. Limb of the flowers somewhat scarlet, scarcely an inch long, with obtuse petals. Stamens pale green; style $4\frac{3}{4}$ inches long; filaments about $4\frac{3}{8}$ inches long, unequal, the lowest the most extended.

The genus is regarded as an ally of Eucrosia, because of the tubercles in its orifice.

This bulb should be potted in sandy loam and leaf-mould. In summer, while growing, it requires to be kept in a temperature of 75° or 80° by day, and shaded in sunny weather. In autumn the leaves will naturally die off, when it should be kept in a warm greenhouse, quite dry, for a few weeks. As soon as the scape makes its appearance, which will be in spring, water should again be given gradually, and the heat increased.

Fig. 1, represents the tube of the flower with the base of the filaments, and the six tubercles of the orifice; 2, the ovary, tube of the flower, and tubercles *in situ*; 3, a transverse section of the ovary.

Miss Drake

SELAGO distans.

Loose-flowered Selago.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SELAGINACEÆ.—SELAGIDS, *Lindley's Vegetable Kingdom, ined.*

SELAGO. Supra, vol. 3. *fol.* 184.

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§ 6. *Suffrutices ; foliis fasciculatis, floribus subcorymbosis v. sæpius spicatis, calycibus variis liberis v. vix imâ basi bracteæ adnatis.*—Walpers Repert. 4. 158.

S. ***distans*** **;** caule subtrichotomè ramoso, ramulis pubescentibus, foliis fasciculatis subincurvatis semiteretiusculis obtusis, junioribus viscidulis, spicis terminalibus solitariis dissitifloris, bracteis oblongis calyce sesquilongioribus, calycibus inæqualiter quinquefidis viscidulis laciniis acuminatis corollæ tubo longioribus.—*Walpers l. c. p.* 160. *E. Meyer Comment.* 266.

We believe this to be the S. distans of E. Meyer; but, in the absence of authentic specimens, it is difficult to acquire a certainty upon the point in a genus like Selago, of which scarcely any species have been figured. Walpers enumerates 68 of them, and they are very much like each other.

The great peculiarity of this is its loose spikes of flowers, and small slender downy leaves, which are solitary on the young branches and fascicled on the old ones.

Fig. 1. represents the corolla split open and magnified; 2. is the one-celled characteristic anther of the order of Selagids; 3. is a vertical section of the ovary.

It is a greenhouse plant, very easily cultivated. The soil best adapted is sandy peat, such as that generally used for heaths. During the summer an ample supply of water should be given to its roots; and in hot weather it must be syringed over head, night and morning. It is a desirable species, in consequence of its early and long continuance in flower. To enable it to exercise this valuable quality, it is necessary to

repot it about the beginning of August, so as to have it well established before winter; for if repotted in spring its flowering will be either retarded or prevented. In winter it will require water twice or thrice a week, with air at all times when the weather is favourable. Fire heat is only necessary to keep off frost. It is propagated by cuttings in the usual way.

The accompanying drawing was made in the nursery of Mr. Glendinning, of Turnham Green, in April last. The flowers are rather sweet-scented, but the foliage has an unpleasant odour.

GARDENIA Stanleyana.

Lord Derby's Gardenia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CINCHONACEÆ—(CINCHONADS, *Lindley's Veg. Kingd. ined.*)

GARDENIA. Botanical Register, vol. 1. *t.* 73.

§ 5. Ternifoliæ, *DeCand. Prodr.* 4. 382.

G. *Stanleyana;* inermis glabra, foliis ternis ovato-ellipticis acuminatis brevè petiolatis, floribus solitariis terminalibus, calycis limbo 5-dentato, corollæ glabræ tubo longissimo clavato sursùm ampliato limbo patenti laciniis 5 obliquis ovatis subcordatis.

G. Stanleyana, *Hooker mss.*

The first intelligence which the public received of the existence of this noble stove plant was derived from the Horticultural Society, at one of whose meetings in London a specimen was exhibited by permission of Sir William Hooker, from the Royal Botanic Garden at Kew. It bore several of its huge flowers, which resembled vegetable trumpets, and was a most remarkable production. The flowers had however faded a little, and the snow-white edge of the corolla, in which much of the beauty resides, was spotted and discoloured.

The mere fact however of a plant having flowered with blossoms eight or nine inches long, and nearly five inches broad, was quite enough to attract attention to it, and those who did not see the specimen while in flower at Kew, have been anxious to behold its image upon paper. We are happy to be able to gratify this curiosity, by the publication of a drawing made in the Nursery of Mr. Glendinning of Turnham Green in June last.

Sir William Hooker has named the plant after the Earl of Derby, one of the great patrons of natural history of the present day, and in whose service Mr. Whitfield was engaged when he discovered the plant. A species better suited to bear the name of this distinguished nobleman could not have been selected.

For ourselves we have had small opportunity of studying the species, and we therefore gladly avail ourselves of the

following memorandum, with which Mr. Glendinning has been so obliging as to favour us.

"Mr. Thomas Whitfield, a most successful investigator of the most unhealthy parts of Africa, succeeded in introducing along with other rare species from Sierra Leone, all which are now in my possession, this remarkable and beautiful Gardenia. The flowers are sent up in great profusion from the base of the numerous shoots, which under good cultivation are always abundant and healthy. They thrust themselves upwards through the beautiful green foliage in a nearly erect position, and are nine inches long, resembling a series of spotted trumpets, thus presenting a very singular and attractive object. The flowers themselves are not unlike the spotted Japan Lilies, and like them also very fragrant.

"What will render the plant a great favourite in our stoves is its easy cultivation. I would recommend rough peat, leaf mould, and silver sand in nearly equal proportions; let the pots be well drained, and place a little moss over the drainage before potting, to prevent the compost from mixing with the drainage; place the plant in a rather high temperature in a close house or pit, and give abundance of atmospheric moisture; under these circumstances the cultivation and flowering of this choice exotic will be certain and complete."

Sierra Leone and the surrounding regions are known to contain other species of this genus, of great beauty; and among them is one which, as it is nearly related to this, was discovered some years since by Mr. Whitfield, and is we believe actually in this country, we shall take this opportunity of naming after its zealous finder, and of briefly describing, as

G. *Whitfieldii;* inermis, foliis ternatis obovatis cuspidatis basi cuneatis brevi-petiolatis glaberrimis, floribus solitariis terminalibus tomentosis, calycis limbo cylindraceo in dentes 5 setaceos longissimos producto, corollæ tubo cylindraceo clavato in limbum latum infundibulare expanso, laciniis 5 obliquis subrotundis basi subcordatis.

The flowers of this plant are very leathery, covered with a close fur, about five inches long, with an expansion of three inches. The long slender calyx teeth are more than an inch long. We received our specimens from Mr. Whitfield some years since, and we believe that plants, then introduced, lurk among the unknown stove plants which have never flowered.

*LABISIA pothoina.

Pothos-like Spoonflower.

PENTANDRIA *MONOGYNIA*.

Nat. ord. Myrsinaceæ—(Ardisiads, *Lindley's Veg. Kingd. ined.*)

LABISIA. Flores spicato-paniculati parvi hermaphroditi. *Calyx* minimus quinquedentatus. *Corolla* coriacea, 5-partita; laciniis æstivatione induplicato-valvatis apice inflexis apiculatis. *Stamina* 5, ante corollæ lacinias et involuta. *Ovarium* ovatum in stylum subulatum productum, uniloculare, placentâ centrali liberâ, ovulis immersis. *Drupa* pisiformis, epicarpio succulento, mesocarpio crustaceo fragili, endocarpio membranaceo separabili. *Semen* solitarium, ovulis reliquis omnibus abortivis, subglobosum, testâ membranaceâ venosâ, albumine duro corneo, embryone filiformi transverso.—— Herba *perennis*, *repens*, foliis *membranaceis*, petiolatis; petiolis basi tumidis vix cum caule articulatis, venis primariis simplicibus dichotomisque divergentibus contiguis, secundariis reticulatis.

Labisia pothoina.

Caulis *pedalis et minor, basi radicans;* ligno *tenui concentrico ezonato,* medullâ *copiosissimâ,* cortice *separabili; vasis seu fistulis resinâ fuscâ repletis per corticem medullamque vagè sparsis. Adsunt præterea undique in foliis floribus fructu canales vesicæ cysti materia eâdem resinosâ farcti.* Folia *palmaria, tenuia, integra et denticulata, in petiolum basi tumidum cum caule inarticulatum decurrentia.* Flores *parvi, candidi, arctè in spicæ imaginem paniculati.* Calyx *vesiculis resiniferis tectus pilosusque ferrugineus.* Corolla *glabra.*

This very singular plant flowered last June in the Garden of the Horticultural Society. It had been received from Penang, without a name, in a collection of curious things liberally presented to the Society by T. Lewis, Esq.

Before it flowered it was taken for a Pothos or some such plant: for its leaves had such regularly parallel veins, and were so entirely unconnected with the stem by a joint, that no suspicion occurred of its being an Exogen. It proved however to be an Ardisiad in its flowers, and a specimen which Mr. Griffith sent home having proved to be in fruit

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* From λαβὶς, a spoon, in allusion to the form of the divisions of the corolla, which resemble the bowls of small spoons.

the structure of the seed has been ascertained to agree exactly with that order.

But, although an Ardisiad, it is quite a new form of that order, remarkable not only for its singular way of growth, but for the æstivation of its corolla, which is neither twisted, nor imbricated, nor simply valvate, but what is called induplicato-valvate; that is to say the sides of the lobes of the corolla are so turned inwards that they fit together where they come in contact, in the same way as happens with carpellary leaves. By this means each lobe of the corolla resembles the bowl of a small spoon, in the hollow of which lies a stamen.

There is also another circumstance which deserves to be noted. Although the plant has no obvious sensible properties, yet it is filled in all directions with little tubes, or cells, or cysts, or passages containing a brown substance of unknown nature. This extends even into the pith; but misses the wood.

From the appearance of Mr. Griffith's specimens, we presume that the plant occupies very damp shady situations.

Fig. 1. represents one of the flowers; 2. a diagram of the corolla and stamens; 3. a perpendicular section of the ovary and calyx.

It is a stove plant, and requires to be grown in a humid atmosphere, where it may have a gentle bottom heat. It appears to succeed best potted in sandy loam, mixed with a little rough peat. Although it is one of very slow growth, still it will require to be repotted every season; this should be done in March, so that the roots may not be disturbed during the growing season. In summer an ample supply of water should be given to its roots, and it must be syringed over-head night and morning when the weather is fine. In winter little water will be required for a few weeks; if the soil is kept moist it will be quite sufficient.

The plant from which the accompanying drawing was taken seems disposed to ripen its seed; this will probably be the only way of multiplying the species; for its stems offer no means of doing so.

CHLORÆA virescens.

Green-veined Chloræa.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ. § ARETHUSEÆ.

CHLORÆA, Lindl. *Perianthium* ringens, basi obliquum, *petalis* sepalo supremo suppositis et galeam referentibus. *Sepala* lateralia basi producta sed vix gibbosa, apice sæpius callosa. *Labellum* unguiculatum, cordatum, cucullatum, membranaceum, integrum aut trilobum, lobo medio lateralibus parum angustiore, venis sæpius cristatis aut glandulosis. *Columna* erecta, membranaceo-marginata, clavata, petalis fere æqualis iisdem dorso adnata, antice utrinque producta. *Stigma* oblongum, prominens. *Anthera* terminalis, opercularis, semiquadrilocularis. *Pollinia* 4, vel 2 bipartita.—— Herbæ *terrestres Americæ australis extra tropicam*, radicibus *fasciculatis carnosis* (*gummoso-farinaceis*, Pöppig). Folia *radicalia*. Scapus *vaginatus*. Racemi *densi, multiflori*. Flores "*sæpe permagni, speciosi, albidi, virescentes, flavidi, vel crocei, nunquam purpurei*" *colore nigro nonnunquam adjecto*, "*odore nonnullis aromaticus.*"—Lindl. gen. & sp. orch. p. 399.

§ 2. Labellum manifestè trilobum.

c. *Labelli venæ centrales appendicibus biformibus.*

C. *virescens*; labelli trilobi lobis ovatis obtusis intermedio duplò majore: venis 9 basi lamellis totidem parallelis æqualibus auctis deinde appendicibus seriatis elongatis v. falcatis, sepalis apice obtusis concavis incrassatis extus verrucosis, petalorum venis varicosis.—*Lindl. l. c. p.* 204. char. emendato.

C. chrysantha, *Pöppig & Endlicher, nov. gen. & sp.* 1. 31. ?

At length we have the satisfaction of producing a figure of one of those beautiful terrestrial Orchids which, under the names of Pichiguen, Gavilu, Azuzena, Pica de Loro, &c., are most charming ornaments of the subalpine pastures of the Cordilleras of Chili. The present, which is one of the finest, has been reared by Mr. Cameron, the intelligent and skilful Curator of the Botanic Garden, Birmingham, by whom it was exhibited at the last May exhibition, in the garden of the Horticultural Society.

Mr. Cameron regarded it as the Chloræa chrysantha of Pöppig, in which he is probably correct; but it is also the

Chl. virescens, so called on account of the green veins which are drawn over the orange ground colour of the gaudy flowers, and the latter name being the oldest must be retained.

Fig. 1. represents the inside of the lip of this plant ; 2. its column ; and 3. its pollen-masses. At the foot of the column are visible two honey pores, which had been previously overlooked in the descriptions of the genus.

Now that the possibility of cultivating these plants has been shewn, and that they are found not to be more difficult of management than a Spiranthes or Sarcoglottis, it is to be hoped that some pains will be taken to procure their roots. They are as common over all the subalpine country between Conception and Valparaiso, as the Meadow Orchises here. It will be necessary, however, to mark their stations when in flower, and to take them up only when the stem and leaves are withered.

This species requires to be grown in a warm greenhouse. The soil best adapted is rough sandy peat. Like most of the terrestrial Orchids, this requires an ample supply of water during the growing season. After flowering the stem and leaves will naturally die off; this being its season of rest little or no water will be required, until it begin to put forth new leaves, when it should be re-potted and encouraged to grow.

CYMBIDIUM Mastersii.

Masters's Cymbid.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ.

CYMBIDIUM, Botanical Register, vol. 3. *fol.* 217.

C. *Mastersii ;* foliis distichis angustè ensiformibus obtusis, pedunculo erecto squamis herbaceis equitantibus acutissimis imbricato, spicâ brevi pauciflorâ squamis immersâ, sepalis petalisque lineari-oblongis acutis, labello obovato trilobo intùs pubescente, lamellis continuis apice confluentibus in tuberculum subtridentatum expansis, laciniâ intermediâ oblongâ undulatâ lateralibus rotundatis planis.

C. Mastersii, *Griffiths in hort. Bot. Calc. Loddiges' Catalogue, no.* 1233.

Pollinia *apice pilosa ;* glandulâ *quadratâ.*

We have no information concerning this plant, further than that it was received from the East Indies by Messrs. Loddiges in the year 1841, and blossomed in December, 1844.

It is a very distinct species, with snow-white flowers, sweet-scented, with the fragrance of almonds. Its erect flower-stalk, closely covered with long green sharp-pointed equitant imbricated sheaths, is quite unlike that of any other species.

It was, we understand, named by the late Mr. Griffith after Mr. Masters, one of the principal assistants in the Botanical Garden, Calcutta. Fig. 1. represents the inside of the lip, and fig. 2. the pollen-masses.

It should be potted in turfy heath-mould, well mixed with potsherds, and liberally supplied with water during its period of growth. To maintain a humid atmosphere, so very essential to the growth of all Orchids, it will be necessary to use shading in sunny weather; by this means the temperature, which should be kept about 80° by day, may be regulated without admitting much air. In winter it does not require much water, but should not at any time be kept too dry.

169 Piccadilly Sep.

G. Barclay sc

AZALEA Lætitiæ.

Garden Hybrid.

RHODODENDRON (AZALEA) Lætitiæ. W. Herbert in litteris.

This beautiful and fragrant hybrid was obtained, with others, from seed of a common Rhododendron Ponticum, impregnated in the greenhouse at Spofforth by pollen of Azalea. Several seedlings raised there perished, as well as others by the pollen of an orange Azalea, and a multitude of the stock of seedlings from Rhodora Camdensis, by Azalea Pontica, of which one of the survivors, under the name Az. Seymouri, was figured in this work; and also of Rhododendron arboreum, by the variety of Azalea called mirabilis. From the difficulty of finding any soil in the neighbourhood that would suit these hybrid plants, which are delicate before they have acquired strength, the soil at Highclere was more congenial to their growth, and some from this seed by Azalea Pontica were preserved there. I have one yellower than this, of which the leaves are rather more durable, and one of which the colour is tinged with a coppery purple. The leaves are rather more durable, broader and blunter, than the leaves of Azalea Pontica; but in this, as in almost all hybrid plants, the male type greatly preponderates. It is difficult to conjecture why, in expelling the purple of the female flower, the yellow of the male should have substituted white. The mode in which colours act in hybrid crosses is singular. When the bright yellow flower of the white turnip is crossed with the dull golden of the Swede, an intermediate colour is not obtained, but some of the mules (as to the colour of the flower) follow one parent, and some the others. When a blue Anagallis is crossed with the orange-coloured, the effect is to discharge the yellow from the orange, and leave the dull red which was combined with it, while the blue remains in abeyance. It will be seen by the figure that our plant sometimes retains the ten stamens of the female, and that sometimes they are reduced to nine, or eight, or even nearer to the quota of

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Azalea. In order to obtain a cross with the leaves more permanent, and like those of Rhododendron, the pollen of the fine white cross between Rhod. Ponticum and Maximum, or of Caucasicum, should be applied to Azalea Pontica, Sinensis, or Calendulacea. The yellow and coppery mules of the late Mr. Smith of Norbiton, were obtained from that white Rhododendron by the pollen of Sinense, and their leaves are not more durable than those of Rhododendron Lætitiæ. It being desirable that no garden varieties should have adjective names, and be thereby confounded with species, this plant is named Lætitiæ, after the Christian name of the Hon. Mrs. W. Herbert.

A naked head of flowers was cut off and the sketch was made from it, but the plant was not deficient in young foliage at the time of flowering.—W. H.

EREMOSTACHYS laciniata.

Jag-leaved Desert-rod.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LAMIACEÆ—(LABIATES, *Vegetable Kingdom, ined.*)

EREMOSTACHYS, Bunge. *Calyx* ample tubulosus, subcampanulatus vel infundibuliformis, dentibus 5, spinosis, vel limbo maximo membranaceo, mucroniformibus. *Corolla* tubo incluso, intus annulato vel nudo, limbo hiante bilabiato, labio superiore elongato galeato subcompresso basi attenuato extus pubescente, intus margineque barbato, inferiore patente trifido, lobis omnibus rotundatis, medio latiore. *Stamina* 4, adscendentia, didynama, inferioribus longioribus. *Filamenta* superiora basi in appendiculam obtusam vel fimbriatam incrassata. *Antheræ* per paria approximatæ, biloculares, loculis divaricatis. *Stylus* apice bifidus, lobis subulatis æqualibus vel superiore vix dimidio breviore. *Achenia* sicca apice densissime pilosa.—— Herbæ *parum ramosæ.* Folia *radicalia caulinis ampliora integra vel dissecta.* Verticillicastri *multiflori sæpe ad apices caulis vel ramorum approximati.* Bracteæ *appressæ.* Corollæ *sæpius ochroleucæ.*—Bentham Genera & Species Labiatarum, p. 636.

E. *laciniata;* foliis pinnatisectis segmentis oblongo-lanceolatis linearibusve inciso-pinnatifidis, calyce amplo tubuloso campanulato apice vix dilatato. *Bentham Genera & Species Labiatarum, p.* 636.
E. laciniata, *Bunge in Ledebour's Flora Altaica,* 2. 416.

This showy herbaceous plant is a common inhabitant of the eastern side of Caucasus and of the adjoining countries, where it is found on dry hills. Its great fleshy roots are evidently adapted to such situations only.

In a wild state it is not half the size of the specimen now figured, nor are its leaves half the breadth: but at the same time the flowers seem to be larger and more conspicuous. This seems to indicate that the plant had been grown in too damp an atmosphere. It appears intended by nature to resist even a Persian summer.

The accompanying figure was made in April last in the Garden of the Horticultural Society, where it had been raised from seeds received from the Imperial Botanic Garden at Petersburgh. It proves to be a hardy perennial with large

spindle-shaped roots, and a stem from four to six feet in height.

It is rather difficult to cultivate in the open border on account of the large fleshy roots suffering in winter from excess of moisture, but it succeeds tolerably well if grown in pots during the winter, and kept nearly dry in a cold pit or frame. It grows freely in a light rich sandy loam, and flowers in May or June.

It is only increased by seeds, and the plants are two or three years before they bloom.

In potting or planting, one-third of the fleshy roots should be left above ground, otherwise they soon perish.

SCHOMBURGKIA undulāta.

Wavy Schomburgkia.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § EPIDENDREÆ.

SCHOMBURGKIA, Botanical Register, 1844. *t.* 23.

S. *undulata* (Lindl. in Bot. Reg. 1844. misc. 21. necnon sub t. 23.) pseudobulbis fusiformibus, floribus densè racemosis, bracteis longissimis spathaceis, sepalis petalisque æqualibus linearibus undulato-crispis labello longioribus, labelli cucullati lobis lateralibus rotundatis intermedio ovali acuto v. obtuso, lamellis 5 undulatis duabusque lateralibus rectis tenuibus.

A year ago we regarded this as the finest of the Schomburgkias: we are now obliged to change our opinion in consequence of a new discovery by Mr. Linden, whose S. rosea is far beyond it in beauty, as we shall presently explain.

The plant now represented was found by that indefatigable traveller, in December 1842, in New Grenada, at the height of 2400 feet above the sea, on the rocks near Pandi, a place, which, in his herbarium, he calls, "the natural bridge of Icononzo." The wild specimens have about 20 flowers in a head, and the plant will therefore become much more beautiful as the cultivated specimens get into better health. Their colour alone distinguishes them from both S. crispa and marginata, and the form of the lip from S. tibicinis.

The glory of this genus is, however, none of those which yet have flowered, but Mr. Linden's Schomburgkia rosea, the number 1664 of his herbarium. "This magnificent species," he writes, "is found on rocks, on the northern slope of the Sierra nevada de Santa Martha. Bracts, peduncles, and lip, are all of a light rose colour; the petals are deep red. It was met with 5000 feet above the sea, between the villages of S. Antonio and S. Miguel, on the territory of the

"Auruhuacos" Indians. The specimens now before me, are most beautiful; and if, as we think probable, they should be alive in this country, we shall yet see a plant far more striking than even S. undulata. Its lip is very nearly circular in its outline, and its lobes are not very different in form, but those at the sides are the largest; even when dry it is of the deep rich colour of the spot in Cattleya labiata. Along the middle of the lip, at the base, there run 4 deep plates standing in pairs, and separated by a tolerably broad space: but near the point of the lip these are exchanged for 3 other short deep very wavy plates, which are pure white.

This plant may be added to the catalogue of Schomburgkias, with the following specific character:—

S. *rosea* (Linden. herb. no. 1664) sepalis petalisque oblongis undulatis labello paulò longioribus, labelli subrotundi laciniis lateralibus rotundatis intermediâ subrotundâ apiculatà crispâ multò minore, lamellis altis pone basin 4 rectiusculis membranaceis versus apicem 3 brevibus crispis.

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HABRANTHUS concŏlor.

Whole-coloured Habranth.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDACEÆ. (AMARYLLIDS, *Lindley Vegetable Kingdom, p.* 155. *ined.*)

HABRANTHUS. Botanical Register, vol. 16. *t.* 1345.

H. *concolor;* foliis hysteranthiis erectis glaucescentibus, scapo unifloro, spathâ tubulosâ coloratâ pedunculo breviore, perianthio subregulari erecto, sepalis apiculatis petalisque oblongis acutis, stigmate altè tripartito coronâ membranaceâ annulari lacerâ.

Habranthus concolor, *Lindley in Proceedings of the Horticultural Society,* 1838. p. 8. *Bentham Pl. Hartweg, no.* 219.

Zephyranths and Habranths are plants so nearly related to each other, that some care is necessary in distinguishing them. The main difference is found in the interior of the flower, where the Habranths have, on the outside of the stamens, a small cup, composed of a membrane, or of certain toothings or scales, which are deficient in the Zephyranths, or at least hardly discoverable. In habit the one-flowered Habranths are the same as the Zephyranths.

In the present species, the cup consists of a membranous ring, cut into irregular toothings or lacerations, and here and there slit down to the base. The flowers, although pale green, are very pretty, and form a lively ornament of the greenhouse, or cold frame, in the early spring. Mr. Hartweg found it in pastures near the city of Leon in Mexico, whence he sent its bulbs to the Horticultural Society, in whose gardens the accompanying drawing was made in April last.

The Dean of Manchester gives the following instructive directions for the management of the species of this genus.

"The Habranthi in general are pretty hardy, but as their

leaf should be in perfection in the winter, it must be liable to injury from frost if not protected in some manner; they require, in order to prepare their blossom, a hot period of rest, which would be often wanting to them if exposed to our climate. When cultivated in a border, they should be covered with a glass frame, to keep them hot and dry in May, June, and July, and any covering of mats or straw that will prevent injury from severe frost may be sufficient in winter; or they may be taken up when the leaves decay, without breaking the fibres, kept in sand, and reset three months after. As most of the bulbs are found in dry gravelly situations, they must require the border to be well drained, which should be done by a layer six inches deep of stones, covered with an inverted sod, or at least with heath, furze, or straw. The same system may be pursued with advantage in deep pots for all plants that are liable to suffer from wet, as Habranthus Bagnoldianus, and Hesperius, placing a thin inverted sod, or some other covering over the crocks or stones, to prevent the drainage from becoming choked, and with that precaution stronger soil may be used than would suit otherwise, and less water will be necessary."

In the Garden of the Horticultural Society this species is found to be a pretty half hardy bulb, which grows freely in a mixture of sandy loam, peat, and a small portion of well decomposed cow-dung. It is there kept dry during the autumn and winter, and in a situation free from frost at all times. It blooms in April and May, just before the leaves appear, and is increased when in a dormant state by offsets or by seeds

Miss Drake del.

Pub. by J. Ridgway 169 Piccadilly Oct.r 1. 1845

J. Barclay sc.

BERBERIS actinacantha.

Ray-spined Berberry.

GYNANDRIA *MONANDRIA*.

Nat. ord. BERBERIDACEÆ.

BERBERIS. Botanical Register, vol. 12. *fol.* 1176.

B. *actinacantha;* spinis palmato 5-fidis margine revolutis, foliis ovatis ellipticisve brevissimè petiolatis basi vix attenuatis rigidis spinoso-dentatis mucronatis junioribus integerrimis, pedunculis 4-5 subumbellatis foliis brevioribus subcernuis, germinibus ovatis vix attenuatis. *Martius in Rœm. & Schult. Syst. Vegetab.* 7. 12. *Hooker & Arnott in Bot. Misc.* 3. 135.

An evergreen bush, apparently common in the neighbourhood of Valparaiso, whence it has been brought by all collectors of Chilian plants. It is not, however, a plant of the coast, but inhabits the first range of the Cordilleras.

It derives its name from the broad ray-like divisions of the spines, which are sometimes very remarkable, much more so indeed than in our figure. But in this respect it varies according to the circumstances under which it grows. In some specimens gathered in Chili by Mathews, the palmate spines are very large, in others from the same botanist, they are very small; in some, brought from the baths of Collina by Macrae, they are much the same as those now represented. The leaves, too, vary in form from roundish-ovate to ovate, and even subcordate. They always have a hard, dry, curled appearance, as if the species were accustomed to a rigorous climate.

Our figure was made in April, 1845, in the Garden of the Horticultural Society, where its deep yellow sweet-scented flowers render it rather a conspicuous object of the smaller sort.

It is a small hardy sub-evergreen shrub, growing three or four feet in height and flowering freely in May and June.

It grows freely either in the American border, or on a rockwork if planted in a rich sandy loam.

It is increased by seeds, or by layers, and sometimes by suckers or grafting, and is quite hardy, having withstood last winter without any injury, except the loss of its leaves, which in very mild seasons remain on during the winter. It is the same plant as that called *Mahonia(!) Knightii* in some of the nurseries round London.

W. Drake del.

J. Ridgway 169 Piccadilly Oct. 1845

GONGŌRA truncāta.

Bean-budded Gongora.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § VANDEÆ—MAXILLARIDÆ.

GONGORA. Botanical Register, vol. 19. *fol.* 1616.

G. *truncata* (Lindl. in Bot. Reg. 1843. misc. 52) ; sepalis lateralibus rotundato-oblongis supremo obovato apiculato carinato, petalis minimis ovatis acutis decurrentibus quinquenerviis, labelli vernicati hypochilio medio compresso (unde bicamerato) margine lævi apice bicorni, epichilio ovato canaliculato.

? G. Galeottiana, *Richard & Galeotti Orch. Mex. ined.*

Whatever opinion may be entertained respecting the specific distinction of other Gongoras, no one can doubt that this at least is very different from all that have been previously discovered.

It is a Mexican species, introduced from Mexico by Mr. Rucker, who received it from Mr. Linden in 1840, and to whom we are indebted for the specimen now represented.

We do not find any thing peculiar in the pseudobulbs or foliage; the characters of the species reside exclusively in the flowers, which are pale straw-colour, with some brownish purple speckles, and a yellower lip. Before expansion they are almost of the form of a bean; which is owing to their sepals being so blunt that when flattened they are nearly half oblong. The lip has no speckles at all, and looks as if varnished. We do not admire the scent, which is quite peculiar.

It is impossible to tell what plants may be intended by the extremely brief specific phrases which have alone been as yet published by Messrs. Richard and Galeotti of their new Mexican Orchids; but as far as the definition of their G. Galeottiana goes, it is not different from this species, whose whole-coloured pale yellow lip is quite pecular. No one regrets

more than ourselves that the ill health of the excellent editor of Galeotti's Orchids should so relentlessly oppose the publication of a work which both botanists and amateurs expect with great interest.

Fig. 1. represents the column and lip of the bean-budded Gongora a little magnified.

It may either be potted in the usual way, or it may be put into a wire basket with moss or rough peat, and suspended to a rafter. This, like many more species of Orchids, requires to be kept moist at the root, as well as in a moist atmosphere, during the growing season. To obtain this in sunny weather, it will be necessary to use shading, by which the temperature may also be kept about 80° by day, without admitting much air. In summer there is little or no need for fire heat; if the house is shut up early in the afternoon it will be found quite sufficient. In winter, when the temperature should average 60°, little water for a few weeks will be required; still it is necessary to keep up a moist atmosphere.

BOLDOA fragrans.

Sweet-scented Boldu.

GYNANDRIA *MONANDRIA*.

Nat. ord. MONIMIACEÆ—(MONIMIADS, *Vegetable Kingdom, p.* 298. *ined.*)

BOLDOA, Jussieu. Flores dioici. Masc. *Perigonium* campanulatum, limbi quinquefidi laciniis patentibus, intus coloratis. *Squamæ* faucis petaloideæ 5, limbi laciniis alternæ et æquales. *Stamina* plurima, perigonii tubo et fauci inserta; *filamenta* complanata, supra basim utrinque auriculata; *antheræ* biloculares, loculis connectivo dilatato opposite adnatis, longitudinaliter dehiscentibus. Fem. *Perigonium* maris, faucis squamis angustioribus. *Stamina* abortiva glandulæformia, juxta faucem et per perigonii tubum sparsa. *Ovaria* 2-9, conica, e perigonii fundo brevissime stipitata, conniventia, apice subcohærentia, unilocularia. *Ovulum* unicum, pendulum. *Styli* filiformes, distincti; *stigmata* simplicia. *Drupæ* 2-9, perigonio demum deciduo nudæ, monospermæ. *Semen* inversum. *Embryo* in axi albuminis carnosi rectus; *cotyledonibus* planis, ellipticis; *radicula* supera.——Arbor *chilensis, aromatica;* foliis *oppositis, breve petiolatis, ovato-oblongis, coriaceis, semperviren·tibus, integerrimis, papilloso-scabris,* racemis *axillaribus.*—Endl. gen. p. 314. sub Ruizia.

B. fragrans, *Jussieu in Annales du Mus.* xiv. 134.
Peumus fragrans, *Pers. Synops.* 2. 629.
"Peumus Boldu, *Molin. Chil. p.* 200. *Feuill. Peruv.* 3. *p.* 11. *t.* 6."
Ruizia fragrans, *Fl. Peruv. Prodr.* 135. *t.* 39. *Syst. Fl. Peruv. p.* 266. 268. *Endl. iconogr. t.* 2019. *Lindl. Veget. Kingdom, p.* 298. *f.* 205. *ined.*

This is a small tree or bush, with a highly aromatic odour in every part. It has round, grey, slightly downy branches, and roundish ovate evergreen opposite leaves, placed on short stalks, and studded with hard points, which give them a very rough surface. The flowers are diœcious, pale greenish white, in little terminal panicles, each branch of which is rather regularly 3-parted. In this country the male only is known. Of that sex the calyx is a leathery cup divided at the edge into an uncertain number of strap-shaped segments placed in two or three rows. All the inside of the cup is lined with stamens, whose filament bears at its base a pair of ear-shaped glands, terminated by a half transparent rim; the anther is oblong,

two-celled, and opens into four equal valves. Hairs surround the base of the filaments; there is no sign of ovary.

The fruit, which is only known in a dried state, is a little drupe about as large as a haw, apparently black and extremely fragrant. It contains a single seed suspended from near the apex of the cell. This seed consists principally of fleshy albumen, but at one end there is a small embryo, with a conical, fleshy, superior radicle, and a pair of thin membranous diverging cotyledons, which are placed over the outside of the albumen, — a very curious structure. This is quite at variance with what is said in the Latin character of the genus, quoted above from Endlicher, but is certainly the true nature of the part.

In Chili the plant is much valued; its wood forms a charcoal, preferred by smiths to all others, and the aromatic fruit is eaten by the natives. In a note now before us, Mr. Bridges says that the tree is from 15 to 25 feet high; that the wood has the same agreeable smell as the leaves, and that the leaves of the male plant are generally smaller than those of the female.

Fig. 1. represents a stamen; 2. its anther after expansion.

The accompanying drawing was made in the garden of the Horticultural Society in December, 1844.

It is a greenhouse shrub, which requires to be potted in sandy loam and peat, in equal proportions. Like most plants under pot culture, it ought to be repotted at least once in the year; and in consequence of its flowering in autumn and winter, this should be done in spring. In summer, an ample supply of water is necessary, and shading in sunny weather; for although it be a hardy-looking shrub, its leaves are very apt to become scorched by the sun. In winter, nothing more than the common mode of cultivation is required: air at all times, when the weather is favourable, and only applying fire heat to keep off frost. It is propagated by cuttings of young wood in the usual way.

Miss Drake del.

Pub.d by J. Ridgway 169 Piccadilly Oct.r 1. 1845

J. Barclay sc

AERIDES maculosum.

Spotted Air-plant.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.

AERIDES. Bot. Reg. 18. *fol.* 1485.

* *Labello indiviso v. tantum auriculato.*

A. *maculosum*; foliis coriaceis planis apice obliquis obtusis, racemis densis nutantibus subpaniculatis, sepalis subrotundo-oblongis, petalis conformibus duplò latioribus, labello ovato subundulato integerrimo basi utrinque unidentato tuberculo indiviso interjecto, columnâ brevissimâ.

This is more like Sir Richard Brookes' Air-plant, figured at t. 55 of our volume for 1842, than any species in our gardens; but it differs in many important particulars.

In the first place, the flowers are distinctly panicled, and not strictly racemose; then they are smaller; moreover, their column is short, and the lip neither crisp, nor toothed, nor saddle-backed, but quite entire, and nearly flat. The little lobes at the base of the lip are also different; in Sir Richard Brookes' they stand at right angles with the column; here they are very small, and direct themselves towards the point of the lip.

The colour of the flowers of this spotted Air-plant is much less vivid; it has more the tint of the A. affine, has very little white, and both sepals and petals are spotted all over with light purple on a pale rose-coloured ground.

The Air-plants divide into two very distinct groups, of which this represents one, and the sweet-scented species (A. odoratum) the other. They are readily distinguished by the form of their lip, which, in the latter, is deeply cut into three or even five lobes of nearly equal length, while in the former group the lip is either not divided at all, or at the most has only a pair of ears or toothings at the base. Those who wish

to remember the differences between the many species of this genus, which are much alike, will do well to bear this in mind.

The accompanying drawing was made in the Nursery of Messrs. Rollissons, in June 1844.

J. Ridgway 169 Piccadilly

CATTLEYA granulōsa ; *var.* Russelliana.

The Duke of Bedford's Rough-lipped Cattleya.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ. § MALAXEÆ—LÆLIADÆ, *Veg. Kingdom, p.* 181. *ined.*

CATTLEYA. Botanical Register, vol. 11. *fol.* 953.

C. granulosa. *Supra,* 1842. *t.* 1.
Var. Russelliana; foliis ovatis, pedunculis trifloris, floribus multo majoribus, petalis magis lanceolatis, labelli ungue angustiore.

Some fatality seems to have attended this beautiful plant in our gardens. It was sent to Sir W. Hooker from Woburn, as a Brazilian Orchid; but we can find no evidence to shew that it is a native of even the Southern hemisphere. At Syon, whence by permission of His Grace the Duke of Northumberland our specimen was supplied, it is said to have been received from Dr. Wallich, in 1839, which is probably another mistake. There can be no doubt at least about its being in reality a very fine variety of the Guatemala C. granulosa, of which the small variety has been already figured in this work, and its introduction may with good reason be referred to one of Mr. Skinner's numerous importations.

It is not surprising that it should have been referred to C. guttata; for the old specific character of the latter fits it very well. But if the figure of that species in the Horticultural Transactions, vol. 2. t. 8. second series, be consulted, the difference between the two will be manifest. The large membranous wavy petals, great erect flowers, and long lip spread out at the point into a broad transverse plate are different from the same parts in the smaller resupinate flowers of Cattleya guttata.

We suspect this plant to be more common in collections than is generally supposed, and that, in fact, it stands in many places as a representative of C. guttata.

The beautiful specimen from which our drawing was made flowered at Syon in May 1844.

November, 1845.

AZALEA Ludoviciæ.

Garden Hybrid.

RHODODENDRON (AZALEA) Ludoviciæ. W. Herbert in litteris.

This charming variety has been named Ludoviciæ by the Dean of Manchester, in compliment to his eldest daughter Louisa. It is a sister seedling to that lately figured (t. 51.), under the name of Lætitiæ, from Rhododendron ponticum by pollen of Azalea pontica.

Nothing can be prettier than their delicately coloured flowers. In the present instance, instead of a pale yellow or straw colour being the prevailing colour, we have a gay rosy tint superadded.

No one would have believed, upon slighter evidence than that of the Dean of Manchester, that such plants as have thus been figured were seedlings from the Pontic Rhododendron, to which they bear no manner of resemblance; and they teach us a lesson in possibilities, which persons unacquainted with such facts will do well to recollect. If the common Pontic Rhododendron can by art, however applied, be compelled to bring forth a Pontic Azalea, there remains no ground for regarding as impossible even such results as the production of Rye, by Wheat or Barley, or of Plums from Pear trees. Events of that kind become conceivable, however improbable they may appear; and such speculations stand on a surer foundation than the doctrine of *atavism*,* which some naturalists admit without reserve.

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* Atavism (from *atavus*, an ancestor) is the doctrine that beings of either the animal or vegetable kingdom bear much more resemblance to their grand-parents than to their immediate parent. A man, according to those who adopt this opinion, resembles his grandfather more than his father; and a seedling follows the same law. Thus, according to Professor Morren, who advocates this notion, if we wish to obtain a seedling Kidney Potato we should sow the seed of a Round Potato, and *vice versa*; the rule of resemblance being this,

Son	Long Potato,
Father	Round Potato,
Grandfather . . .	Long Potato,
Great Grandfather . .	Round Potato,

and so on.

DENDROBIUM Kingiānum.

Captain King's Dendrobium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ. § MALAXEÆ—DENDROBIDÆ, *Veg. Kingdom. p.* 151. *ined.*

DENDROBIUM. Supra, vol. 15. *fol.* 1291.

Sect. DESMOTRICHUM, (*Blume Bijdragen, vol.* 1. *p.* 329.) Pseudobulbi e rhizomate articulato nati. Labellum per axin lamellatum (an semper?)

D. (Desmotrichum) *Kingianum* (Bidwill MSS. Lindl. in Bot. Reg. 1844. misc. 18); pseudobulbis ovatis in collum longum extensis apice bifoliis, foliis ovalibus emarginatis, pedunculo terminali 2-3-floro foliis æquali, sepalis ovatis, mento emarginato, petalis obovatis apiculatis duplò brevioribus, labelli trilobi cuneati pubescentis laciniis lateralibus acutis intermediâ paulo longiore transversè rhombeâ angulis lateralibus rotundatis apiculi acuto, axi elevatâ trilineatâ apice tridentatâ.

This curious epiphyte was bought by the Messrs. Loddiges at the sale of Mr. Bidwill's New Holland Plants, two or three years since. It has pseudo-bulbs between four and five inches long, tapered from an ovate base into a very long and narrow neck, on the top of which stand two oblong emarginate dark-green rather wavy leaves. Between these is a flower-stalk having two or three pink flowers gaily spotted with crimson in the inside. On some of the offsets the number of leaves is four, but the prevailing number is two.

Among the genera of Orchids proposed by Dr. Blume in his Bijdragen was one called Desmotrichum, consisting of caulescent epiphytes with "root-shaped jointed bulbiferous stems," or rhizomes, leathery leaves growing on the bulbs, and fascicled, or solitary or somewhat racemose flowers springing out from the base of the leaves. This character was accompanied by a description of flowers which hardly distinguished the genus from Dendrobium; nor did the figure of two of the species, given in the same learned author's Tabellen shew any sufficient peculiarity to cut the genus off from

Dendrobium, notwithstanding the peculiar habit, which is something like that of Bolbophyllum.

A careful examination of such species as have come beneath our observation within the last few years has equally failed to satisfy us of the distinctness of the genus. In fact, there is but one character deserving of notice that we are able to point out, and that is the presence of two or three raised ridges or plates upon the axis of the lip. Such plates or ridges occur conspicuously in the present species and in D. angulatum, criniferum, Scopa, longicolle, amplum, and some others, which would therefore be thus sufficiently well characterized. But there are no plates or ridges in D. aggregatum or Jenkinsii, which have the habit of the genus, to say nothing of D. braccatum, muscicola, and extinctorium, which require re-examination. Further consideration, and a more extensive knowledge of species are necessary in order to settle this point.

Fig. 1. represents the column of this plant, and fig. 2. the lip spread flat and magnified.

The species may either be potted in turfy peat, in the usual way, or it may be tied to a block of wood, and suspended to a rafter. Like many other Orchids it requires a good deal of water during summer, and a slight shade in sunny weather. In winter, for a few weeks, no more water should be given than keeps the stems from shriveling. The temperature most congenial to this plant, is little more than that of a common greenhouse.

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Miss Drake 160 Piccadilly Nov.r 1 1845 G. Barclay sc.

POTENTILLA bicŏlor.

Two-coloured Potentil.

ICOSANDRIA *POLYGYNIA*.

Nat. ord. ROSACEÆ, or ROSEWORTS, *Veg. Kingdom, p.* 563. *ined.*
POTENTILLA. Botanical Register, vol. 16. *fol.* 1387.

Section 1. POTENTILLASTRUM.

§ 1. *Foliis palmatisectis.*

ASIATICÆ.

P. *bicolor;* caulescens, undique pilis longis mollibus vestita, foliis subtus albido-sericeis radicalibus et inferioribus caulinis digitatis: foliolis obovatis grossè serratis, superioribus ternatis oblongo-lanceolatis summis lanceolatis trifidis integrisque, stipulis ovatis inferioribus serratis, floribus laxè racemosis imò paniculatis, sepalis exterioribus lanceolatis trinerviis interioribus ovatis omnibus petalis venosis pictis subrotundis emarginatis duplo brevioribus.

We fail to discover this pretty Nepal herbaceous plant among the many specimens which our herbarium contains from Dr. Wallich and other friends, nor do we perceive that it has been previously described. The actual state of the genus Potentilla is such as to leave us far from satisfied upon this point.

In general appearance it looks like a hybrid between P. atrosanguinea or nepalensis and insignis, but it has certainly a wild origin, as will be presently explained. In some respects it approaches Potentilla insignis itself; but its hairs are long and soft, not short and close, and its leaflets are in fives not in threes. It may also be compared to P. villosa, which is found in Nepal, if Dr. Lehmann is right in referring P. leucochroa to that species, but it is five-leaved, and long-haired, with none of the hoariness of the latter.

The appearance of the petals is most delicate and beautiful —far more so than our colourers can represent. Their ground colour is clear yellow, over which, at the base, is drawn a series of long hexagonal red meshes, which form towards the

circumference of the flower other meshes of a finer and closer fabric, till at last they melt as it were into each other, and form a clear red border to each petal.

This pretty species is a perennial, with much the same kind of trailing habit, as the old Potentilla nepalensis, but it is rather more robust. It requires the same kind of treatment, grows freely in any good rich garden soil, and flowers from July to September.

It is easily increased by cuttings of the young shoots, taken off either in May or September; when two or three inches long, placed in sand under a bell glass and kept close. It was raised in the Garden from seeds received from the Honourable Court of Directors of the East India Company, through Dr. Royle, and is said to have been collected either in Cashmere or Thibet.

Miss Drake del.

Pubd by J. Ridgway 169 Piccadilly Nov.r 1 1845

STATICE Fortūni.

Mr. Fortune's Sea-Lavender.

PENTANDRIA *PENTAGYNIA*.

Nat. ord. PLUMBAGINACEÆ, or LEADWORTS, *Veg. Kingdom, p.* 640. *ined.*

STATICE. Botanical Register, vol. 17. *t.* 1450.

S. *Fortunii;* foliis glaucescentibus rosulatis oblongis basi trinerviis nunc apiculatis nunc apice rotundatis in petiolum latum angustatis, scapo rigido erecto paniculato, ramis angulatis brachiatis glabris rugosis omnibus floridis et sursum curvis ideoque secundis, glomerulis laxè aggregatis ipsisque laxis, bracteis 2-floris ovatis obtusis latè membranaceo-marginaris, calycis costis pilosis, petalis liberis emarginatis luteis, ovario acutè quinquangulari.

A yellow flowered Sea-Lavender is a rarity. This, which is a very interesting species, is a perennial, and will probably prove quite hardy. Its seeds were sent from China by Mr. Fortune in 1844, and were said to have been gathered at a place called Chin Chin, "growing in sandy soil near the sea."

The latter circumstance will probably enable us hereafter to cultivate it better; for Mr. Fortune's wild plants are not more than a foot high, while those which have flowered in the garden of the Horticultural Society, have been twice or thrice as large, or even more. They had been too tenderly treated. This is important, because it is easy to conceive that the beauty of a plant having many small flowers depends much upon their compactness.

In a frame or greenhouse it flowers freely from July to October, and is easily increased either by dividing the old plants in autumn, or early in spring, or by seeds, which should be sown about March, by which means the young plants flower the same season; if sown later, they will not flower before the following season.

In our gardens we have nothing like this. There is, however, in books, a Statice aurea, of which Ammann gives

a rude figure, that also has yellow flowers But that plant, which is Siberian, seems to belong to the species whose lower flowering branches are sterile, as indeed its old name, "Limonium montanum humile *Ephedræ facie*," indicates. We have not, however, seen any specimens of it.

It might be worth the while of those whose gardens are near the sea-shore to see whether S. Fortuni could not be cultivated in salt marsh soil; for it is evident from Mr. Fortune's specimens, that they were pulled out of a soft muddy station. They are far prettier than the garden specimens, which themselves look better than the artist represents them in the accompanying figure.

ONCIDIUM incūrvum.

Curved Oncidium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDACEÆ. § VANDEÆ—BRASSIDÆ, *Vegetable Kingdom, p.* 181. *ined.*

ONCIDIUM. Botanical Register, vol. 9. *fol.* 727.

Sect. 2. EUONCIDIUM. Labellum basi auriculatum, indivisum v. trilobum.

†† *Sepala v. petala basi angustata.* Heteranthium.

* Folia plana.

‡‡ *Pentapetala ;* sepalis lateralibus omninò disjunctis.

¶¶ Micropetala ; *petalis sepalis lateralibus subæqualibus et similibus.*

O. *incurvum ;* pseudobulbis ovatis ancipitibus utrinque 3-4-costatis ditriphyllis, foliis ensiformibus acutis, scapo elongato racemoso-paniculato, sepalis lineari-lanceolatis undulatis liberis, petalis conformibus incurvis, labelli laciniis lateralibus rotundatis nanis intermediâ subrotundâ concavâ acutâ, cristâ ovatâ depressâ dimidiâ inferiore lineatâ superiore tricostatâ, columnâ subapterâ.

O. incurvum, *Barker in Bot. Reg.* 1840. *misc.* 174.

This striking, and very peculiar species, was first observed in this country, by George Barker, Esq. of Birmingham, from whose rich collection we were favoured with flowers in 1840. Since that period it has found its way into the possession of others, especially of Mr. Ferguson, late gardener to the Duke of Buckingham, who succeeded in growing it extremely well. It is, however, still one of the more rare species.

Mr. Barker gave it the name of incurvum, in consequence of the petals having a great tendency to turn inwards when the flowers first open ; that tendency is, however, eventually lost, and the parts assume the position customary in the genus.

In some respects it resembles the Birds-bill Oncid, but it bears its flowers in a long, erect, and even branched panicle, and it has neither the long rostel, nor the great column-wings

of that species. Its colours are, moreover, very different, for its petals and sepals are regularly and neatly banded with red on a white ground, instead of being of one uniform rosy tint.

Fig. 1 represents the appearance of the column and lip seen from the front; in this instance, the lower tier of tubercles belonging to the lip-crest, are too much in relief. It also shews that the column is not absolutely without wings, as we first supposed, but really possesses two very small ones.

It requires to be potted in turfy heath-mould mixed with potsherds. Being a free growing species, both an ample supply of water and a moist atmosphere are necessary during summer; and although the species is less liable to become scorched by the sun than many others, still it should be shaded in sunny weather, in order to keep the temperature as near 80° by day as possible, without admitting much air. In winter, if a moist atmosphere is kept up, very little water will be required at the roots, nor need the temperature be raised above 64° by fire heat.

STANHOPEA inodōra.

Scentless Stanhopea.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § VANDEÆ—MAXILLARIDÆ.

STANHOPEA. Supra, fol. 1800.

S. *inodora ;* spicâ contractâ, bracteis latis oblongis ovario æqualibus, floribus inodoris, sepalis lateralibus ovato-oblongis ovario subæqualibus, hypochilio subcompresso brevi saccato intus glabro anticè bidentato et inter dentes profundè sulcato, epichilio subrotundo-ovato integerrimo cornubus incurvis longiore, columnæ alis latis sensim evanescentibus.

S. inodora, *Lodd. cat. ult. no.* 1147.

Among the most beautiful of the Stanhopeas is that apricot-coloured species, with very large flowers forming a spreading spike, to which the name of *graveolens* has been applied in consequence of its offensive odour. The kind now represented is in many respects very like it; but it is scentless, and much paler than any variety of S. graveolens which we have seen.

Messrs. Loddiges imported it from Mexico, and furnished, in June 1843, the specimen now represented.

It differs from S. *graveolens* not merely in its pale scentless flowers, but other circumstances of more importance. In the parts of the flower we are not indeed prepared to point out much difference beyond the form of the column, which in this species has its side wings gradually narrowing downwards till they disappear, while S. *graveolens* has them as broad at the one end as the other, whence its column has almost the form of a parallelogram. The form of the spike is quite different in the two species, owing to the unusual shortness of the ovaries. In S. *graveolens* it is very wide, after the manner of S. *oculata*, the ovary being considerably longer than the lateral sepals ; but in S. *inodora* it is as much contracted as

in S. *insignis*, there being little difference in length between the length of those parts.

If this species were to be distinguished by more popular characters, it might be stated to have the inflorescence of S. *insignis*, the form of S. *graveolens*, and the colour of S. *saccata* without its dots. If S. *insignis* inhabited the same country as S. *graveolens*, one might fancy the S. *inodora* to be a mule between the two.

As the specific character of S. graveolens, given in the enumeration of the genus published in this work in the volume for 1844 now requires amendment, we repeat it here.

S. *graveolens* (Lindley in Bot. Reg. 1840. misc. 125); spicâ expansâ, bracteis angustis ovario vix æqualibus, floribus graveolentibus, sepalis lateralibus ovato-lanceolatis ovario duplò brevioribus, hypochilio subcompresso brevi saccato intus glabro intra scrotum glanduloso et lamellato anticè bidentato interque dentes profundè et apertè sulcato, epichilio subrotundo-ovato integerrimo, cornubus acuminatissimis latis planis incurvis, columnâ alis latissimis subquadratâ.——*Guatemala ?*——This is a beautiful species with the habit of S. oculata. The sepals and petals are of a delicate straw colour; the lip at the base and the central parts of the flower generally are of a deep rich apricot yellow, while the horns and upper end of the lip are like ivory turning yellow. The odour of the species is so powerful that it communicates itself to the fingers after touching the flowers, and is extremely disagreeable. It varies with flowers of a deep apricot colour throughout, when it becomes the S. *aurata* of the gardens. Its very broad column, winged to near the base, so as to have almost the form of a parallelogram, is an important character. The lip appears at first sight to be quite smooth inside, but it is in reality covered with glands within the anterior pouch.

ANEMŌNE japonica.

Japanese Anemone.

POLYÁNDRIA *POLYGYNIA*.

Nat. ord. RANUNCULACEÆ.

ANEMONE. Botanical Register, vol. 3. *fol.* 200.

A. *japonica*; caulescens, foliis radicalibus caulinisque ternatim sectis, segmentis cordatis trilobis inæqualiter duplicato-serratis, involucralibus inferioribus petiolatis basi cuneatis cæterum conformibus, superioribus sessilibus, pedunculis elongatis v. nudis unifloris v. dichotomo-ramosis et iterum involucratis, sepalis plusquam 20 extùs sericeis, cariopsibus ecaudatis densè villosis.—*Siebold Fl. Japonica*, 1. *p.* 16. *t.* 5.

Atragene japonica, *Thunb. Fl. japon. p.* 239.

Clematis ? polypetala, *DeCand. Prodr.* 1. 10.

How any one, calling himself a botanist, could have fancied this plant to be an Atragene passes our skill to explain. Yet such has been the case, for it stands as an Atragene in the writings of Thunberg, a Swedish botanist, who once possessed some reputation. DeCandolle might well hint that it was probably an Anemone, as indeed was tolerably apparent from the description of it.

It is not only an Anemone, but a most beautiful one, not inferior to the Chinese Chrysanthemum, or even the Anemone coronaria of the East. For its introduction to this country the public is indebted to the Horticultural Society, who received it from Mr. Fortune, in 1844. That indefatigable collector had met with it at Shanghae, the Japanese port of China.

It has flowered this autumn in great beauty in the garden of the Society, in a greenhouse, its flowering stems being nearly two feet high. It may, however, be expected to be better suited to the open border, at least during summer, and

it is probable that it will not suffer even from the cold of winter.

According to Siebold it inhabits damp woods, on the edges of rivulets, on a mountain called Kifune, near the city of Miako, in Japan. The same author tells us, that it is much cultivated by the Japanese, for the sake of its beautiful purple blossoms. Many find it prefer a moist loamy soil. It is usually propagated in Japan by offsets, for its seeds rarely ripen. M. Siebold adds, that it grows at considerable elevations on the mountains of the centre of Japan, whence he infers that it will bear even a continental winter.

GOVENIA fasciāta.

Linden's Govenia.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § VANDEÆ—MAXILLARIDÆ.

GOVENIA. Bot. Reg. vol. 21. *fol.* 1795.

G. *fasciata* (Lindl. in Bot. Reg. 1843. misc. 107); foliis latis ovalibus acutis, spicâ laxâ, bracteis ovario æqualibus abruptè acutis, sepalis angustis acutis, petalis latioribus, labello oblongo subquadrato apiculato intus lævi, antheræ mucrone inflexo.

Among the genera of Orchids there is not one whose species are so difficult to distinguish as those of Govenia; a most natural group, with most of its members extremely similar in habit. In a dried state they are so much alike, or they vary so much in the appearance of their flowers, in consequence of the manner in which they shrink, that it is hardly possible to recognise them.

That which is here figured was named in this work two years since, and was supposed to be Mexican. We now, however, find it among Mr. Linden's Merida plants, under two numbers, 644 and 654. Both were found by that most industrious collector in Venezuela, in damp forests, at the height of 5000 feet above the sea, and are distinguished from each other in his memoranda by the flowers of one having the markings more broken into specks and spots than the other. Both were gathered in July, 1842.

It is one of the prettiest of the genus, having clear yellow flowers, whose sepals and petals are beautifully marked by fine broken bands of crimson. The long bracts, thin narrow spike of flowers, and oblong, not ovate, lip, are the marks by which it is best recognized. The leaves are about a foot long and three inches wide.

Fig. 1. represents the exact form of the lip of this species, and 2. a side view of the column and anther.

Our drawing was made from a specimen communicated by Mr. Rucker in September, 1843.

Govenia fasciata is a stove plant, which requires to be potted in rough peat mixed with about one-third sandy loam. Being a terrestrial Orchid, it necessarily requires an ample supply of water during the growing season, and a slight shade in sunny weather. In autumn, when its leaves begins to die off, water should be gradually withheld, in order to give it its due season of rest; for if watered and excited to grow in winter, when there is not sufficient light to mature the tubers, they will be small and apt to damp off; nor will it succeed in summer if this is not properly attended to. In spring, when it begins to show symptoms of growth, it should be repotted and placed in a humid atmosphere, where, for a few weeks, it may receive water every fine day.

The following are the species of Govenia at present published, with their synonymes.

*1. G. superba, *Lindl.*—(*Maxillaria superba*, La Llave.)
*2. G. lagenophora, *Lindl.*—(*Cymbidium utriculatum*, Swartz. —*Limodorum utriculatum*, Id.)
*3. G. fasciata, *Lindl.*
*4. G. Gardneri, *Hooker.*
5. G. alba, *Rich. & Galeotti.*
*6. G. liliacea, *Lindl.*—(*Maxillaria liliacea*, La Llave.)
*7. G. capitata, *Lindl.*
8. G. pauciflora, *Lindl.*
9. G. tingens, *Pöppig & Endl.*
10. G. barbata, *Pöppig & Endl.*

Of these the species with an asterisk are or have been in cultivation in this country.

OXĂLIS sensitīva.

Sensitive Wood-sorrel.

DECANDRIA *PENTAGYNIA*.

Nat. ord. Oxalidaceæ.

OXALIS. Botanical Register, vol. 2. *fol.* 117.

O. *sensitiva;* foliis pinnatis multijugis, pedunculis apice multifloris.
O. sensitiva; *Linn. sp. pl.* 622. *Jacq. ox. mon. no.* 21. *t.* 78. *f.* 4. *Walpers repertorium,* 1. 491.
Biophytum sensitivum, *DeCand. Prodr.* 1. 690.
Herba sentiens, *Rumphius Herb. Amboin. V. p.* 301.

This curious little sensitive plant often comes up among mould received from the East Indies, and, being an annual, will sometimes take possession of the soil in the garden pots of hothouses, so as to become troublesome. It is found wild over all the tropics of Asia; or at least, if there are several species confounded under the same name, some one or other is there found.

Dr. Wight inclines to the opinion that various species are mixed up by botanists under the name of Oxalis sensitiva, differing in their manner of growth, hairiness, form of the leaflets, and other circumstances. We know not how this may be. The kind now figured is the only one that we have seen in cultivation. It was raised in the garden of the Horticultural Society from seed sent from China by Mr. Fortune; and is quite different in the stamens and stigmas from the plant figured by Dr. Wight under the name of Biophytum Candolleanum.

DeCandolle distinguished this, and another species, from the genus Oxalis, because the stamens are separated all the way to the base: but the analogy of the genus Geranium forbids us to attach any importance to the circumstance.

Rumphius tells us, that in Amboyna the leaves are so extremely irritable that they cannot bear that the wind should

blow on them, or even that they should be breathed upon. At the least irritation they close up, and the plant looks as if it were dead. We see no such sensibility in our hothouses. He adds, that the amount of irritability varies from time to time, and from individual to individual; that the leaves are most able to bear irritation before 8 o'clock in the morning, when the sun has just expanded them. This sensitive quality is somewhat injured if the plant is removed into a garden. The worthy Dutchman expresses his surprise, that so delicate a plant, which cannot bear the least molestation, should, nevertheless, be so continually found in gardens, and by the roadside, where it is most exposed to violence; doubtless, he adds, it is like young ladies, who wish to be looked at, but not to be touched.

Among the nations of the East, the plant has been applied to various superstitious purposes, as an ingredient in philters, and magical incantations, concerning which the reader is referred to Rumphius, who gives a curious account of the odd fancies connected with its uses.

LÆLIA pedunculāris.

Long-stalked Lælia.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDACEÆ. § EPIDENDREÆ.

LÆLIA. Lindl. supra, 1839. *misc.* 42.

§ 1. Grandifloræ ; ***Petals distinctly larger than the sepals.***

L. *peduncularis* (Lindl. in Bot. Reg. 1842. misc. 10) ; pseudobulbis subrotundis compressis lineâ utrinque elevatâ, foliis oblongis obtusis scapo tereti vaginato brevioribus, corymbo multifloro, bracteis ovatis abruptè acutis pedunculo pluries brevioribus, petalis oblongis obtusis sublaceris planis, labelli lobis lateralibus abbreviatis obtusis recurvis antice subdentatis intermedio oblongo rotundato plano subrepando lineis 2-4 elevatis.

When this plant was first named, in the winter of 1841-2, upon the inspection of a specimen sent to London, from the rich collection of Mr. Barker of Birmingham, a very imperfect idea was formed of its real beauty, for the specimen was withered, and injured in the transmission. In November, 1844, we, however, again received it from the same gentleman, and then found it to be what is here represented, one of the most ornamental, and perhaps the most graceful, of the genus.

Its flowers are of one deep rose colour, a little heightened at the lower part of the lip, and they droop gracefully from the end of a slender elastic scape. The unusually long pedunceles add to the elegant appearance of the species.

It approaches most nearly to the Lælias rubescens and acuminata. From the former it differs in its lip : having none of the hairiness of that species, and its flowers being much more closely arranged ; from the latter, in neither its petals nor lip being wavy and sharp pointed ; and from both, in its very large whole-coloured flowers, flat jagged petals, short recurved lip-lobes, and very long flower-stalks.

The species is one of Mr. Barker's valuable importations from Mexico.

It may either be tied to a block of wood, with a little Sphagnum to retain moisture, or it may be potted in turfy-heath-mould, in the usual way. During the growing season, an ample supply of water should be given, and the atmosphere kept as moist as possible, at a temperature of 80° by day. To accomplish this, it will be necessary to use a slight shading in bright weather, which will also prevent the leaves of the plant from being scorched by the mid-day sun. In winter, if the atmosphere can be kept moist, very little water will be required for a few weeks. The temperature should never be raised above 65° with fire heat.

MISCELLANEOUS MATTER

OF THE

BOTANICAL REGISTER.

1845.

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1. CROCUS Damascenus.

C. *Damascenus*; c. tun. vaginaceis membranaceis non reticulatis tenuibus fugacibus interioris basi fibris setosis tenuibus radiatis persistente, foliaceâ exteriore longè et tenuiter usque ad basim prope fundum affixam reticulatâ, (in obsoletis demum cribrosâ) interioribus omnibus parvulis in ipso vertice sitis, vaginâ interiore acutâ exsertâ, tertiâ subterraneâ, foliis 3-4 angustis lævibus hysteranthiis, scapo nudo, germine albido, spathâ vix inclusâ bracteam tubum involventem non tubatam parum superante, perianthii tubo $1\frac{1}{8}$ unc. exserto saturatè purpurâ sexstriato, limbo griseo-cœrulescente fauce lævi petalis sepala extus plumeo-tristriata $1\frac{1}{8}$ unc. vix æquantibus, stylo albicante stigmatibus profundè furcatis erectis, filamentis albis lævibus circ. $\frac{3}{8}$ unc., antheris pallidè luteis $\frac{5}{8}$ unc. apice curvato stylum superantibus, capsulâ longâ superne purpurâ striatâ et suffusâ, seminibus purpureo-rufis oblongo-ovatis raphe productâ concolore. *Ex montibus aridis calcareis prope Damascum effossus apud me Septembri ante ortum foliorum floruit. Longioribus et tenuioribus reticuli maculis et tunicâ ad basim ipsam reticulatâ neque, ut in C. reticulato auri-striato, variegato, et albicante, inferne rigidè parallelo-fibrosâ primo aspectu discernitur; stylo, staminibus, et bracteâ differt; cætera sàtis conformis. In Damasceno et variegato ex aridis persistunt tunica foliacea exterior et basis radiata vaginaceæ interioris annorum* 20-30; *apud nos humiditate citò depereunt.*—W. H.

For the knowledge and possession of this plant I am indebted to J. Cartwright, Esq. and the Vice-Consul at Damascus. The bulbs were taken up in February and in May, the period of flowering not being mentioned. Its affinity to

the variety of the vernal C. reticulatus called variegatus, which grows in Lippiza forest near Trieste, is evident; but it produced its flower at Spofforth in September before the leaf, which immediately followed its decay. No yellow Crocus having been sent from Damascus, this is probably the plant of which the roots are eaten by the natives. The hills near Damascus are the most southern habitation of Crocus yet ascertained. The summit of Lebanon with which they are connected being 9520 feet high, they are probably very elevated.—*W. H.*

2. CROCUS intromissus.

C. ***intromissus*** ; (***forsan C. sativus, var. intromissus***) cormo pyriformi, tunicis pallidè purpureo-brunneis (ut in sativo) vaginaceis fibris submollibus tenuibus parallelis superne reticulatim confluentibus duâbus pariter ferè ad cormi basim tertiâ internâ parum supra affixis, foliaceis similibus dimidiatis vel spiræ modo connatis apice multifido complanato submolli, exteriore medio cormo vel supra cæteris gradatim altiùs affixis, foliis quatuor suberectis lævibus. ***Cormus unicus cum C. Damasceno effossus est tunicis annorum quinque integris et maturæ magnitudinis octonis igitur natalibus vel ultra, absque cormorum incremento, satis tunicas sativo similis, multo minor, foliis paucis lævibus. Flos, adhuc ignotus vernus forsitan eveniet. Sativo incrementum abundans est, folia ciliata permulta,*** 11-12.—*W. H.*

3. CROCUS vallicola.

C. ***vallicola*** ; flore autumnali, spathâ (ebracteatâ ?) circiter sesquiunciam exsertâ, perianthio albo $1\frac{3}{8}$ unc. acuto maculis binis luteis in laciniæ cujusque regione inferiore, sepalis vix $\frac{3}{8}$ unc. latis, petalis parum angustioribus, tubo ultra unciam libero superne ultra $\frac{1}{4}$ unc. ampliatè producto, filamentis albis $\frac{1}{4}$ unc. antheris semuncialibus (nî fallor in sicco) albis ? stigmata sæpissimè apice bifida ferè æquantibus, stylo pallidè subaurantiaco gracili. ***Foliis hysteranthiis et cormo nondum visis ; filamentis cum fauce, ni fallor in sicco, lævibus. In societate Croci cujusdam cœrulescentis sub fine Octobris floret, in convalle monticulosâ alpium Trapezunticarum ad pedes vallis orientalis summæ in monte Koulak Dagh dicto, ab hospitio primo in cacumine plus horæ unius itineris spatio a pago Stauros dicto accedenti.***

Stauros is situated in the province of Trebizond, on the road to Erzerum. The pass is not open till late in June, and the height of the Koolak mountain can scarcely be less than 5000 feet, if it be not greater. From the Croci found there I

entertain no doubt of its being calcareous. A specimen of the flower of this plant gathered at the end of October, 1843, was sent to me by Mr. Theodore Kotschy, and by his accurate description of the place of its growth, and the kind assistance of the British Vice-Consul at Trebizond, Mr. Cartwright has been able most obligingly to procure for me a fresher flower gathered last month, viz. October, 1844, and I understand that the living roots have been taken up; but I do not hear that the blue or rather perhaps purple flower has been yet discovered.—*W. H.*

4. CROCUS Mazziaricus.

C. *Mazziaricus*; cormi tunicis vaginaceis fibris tenuibus confertim reticulatis inferne citò laceris fugacibus basi persistente fibris radiatis $\frac{1}{4}$ uncialibus tenuibus setosis, foliaceâ exteriore subtiliter reticulatâ prope basim, proximâ subsimili minore juxta verticem, cæteris parvulis summo cormo affixis, foliis hysteranthiis circiter quatuor, spathâ nudâ [ebracteatâ, ni fallor] $\frac{3}{4}$ unc. liberâ, perianthio concolore albo, tubo sesquiunciam libero, limbo circiter sesquiunciali, antheris stylo gracili superne tenuiter submultifido pallidè coccineo semunciam vel infra brevioribus. *Antherarum color adhuc incertus est. Ad C. Damascenum et C. reticulatum spectat. Crocone vallicolæ affinis, vallicolæ cormo adhuc ignoto, non satis constat. Floret Octobri circa radices montis Cariæ et in viciniâ Caradiaticæ in Leucade a dom. A. D. Mazziari, sed non alibi, inventus. Ex basi t. vag. int. radiatâ setosâ scapum nudum esse conjicio.*—W. H.

5. CROCUS Ionicus.

C. *Ionicus;* spathâ $\frac{3}{4}$ unc. liberâ acutâ (ni fallor in sicco, ebracteatâ superne bifidâ) perianthio albo? [in sicco concolore stramineo] tubo $\frac{3}{8}$-$\frac{3}{4}$ unc. libero, limbo unciali acuto, filamentis ori cylindri insertis $\frac{1}{4}$ uncialibus, antheris circiter $\frac{3}{8}$ stigmata tenuiter et profundè multifida recta non æquantibus, foliis quinque subsimultaneis ortu angustissimis. Cormus a me non visus est, neque innotuerunt tunicæ; a C. Cartwrightiano et cæteris quæ ad sativum spectant stylo non subtruncato pendulo, a Pyrenæo, specioso, medio, Byzantino et Clusiano stylo non capitato-multifido discedit; cormo nondum viso, nescio an C. Tournefortiani varietati Venereæ affinis. C. Ionicus Corcyram in collibus Botumiæ et Cephalo Ypso prope domum dom. Pieri defuncti, et Leucadem in monte inter Phrinem et Phaneromenem usque ad Zucalades habitans autumno floret. A dom. A. D. Mazziari lectus.—*W. H.*

6. CROCUS Cartwrightianus, *varietates.*

C. *Cartwrightianus v. Creticus ;* c. tun. lætiùs badiis, foliis paucioribus, perianthio extus pallidè stramineo. Variat intus ex albo magis purpurascens, stylo interdum odoratissimo. *Prope Caneam in Cretâ insulâ.*

———————— *v. Leucadius ;* perianthio albo concolore, stigmatibus tenuioribus foliis circiter sex. In collibus Marandoioræ in Leucade et in insulis vicinis Scorpio et Meganissi dictis Octobri a dom. A. D. Mazziari lectus.

The first of these two plants was obtained for me by Mr. Cartwright from Canea in Crete, where it was said to be vernal with a yellow flower. On the receipt of one dry bulb last June, I carefully examined it, and from its structure I replied that I believed it would prove not to have a yellow flower, but to be closely allied to the autumnal Cartwrightianus. I was answered that it was certainly vernal, but before that answer arrived it had put forth leaves in October, and other bulbs thereof received soon after flowered upon my table in November and one in December, differing from Cartwrightianus in the pale straw-colour of the outside of the flower, and in little else. This shews the importance of taking the character from the bulb. Flowering, like Cartwrightianus very late, its blossom may perhaps be delayed till after the close of the year, if early snow falls upon it, or cold weather sets in with the first autumnal rains. C. Cartwrightianus, and Pallasianus of the Crimea, which is insufficiently described, are evidently connected closely with C. campestris, and may perhaps with a view to generalization be placed as varieties under that name given by Pallas. Concerning C. Cartwrightianus I may add, folia superficie ortu glaucescentia, flores petalis minoribus duo ex eodem involucro quandoque simultanei, perianthium quam maximè variat ex albo plùs minùs lilacino suffuso, limbo intus plùs minùs saturatiùs dilutiùs lineis purpureis notato. I have scarcely seen two of the plants from Syra or Tino exactly similar in the colour and markings, but I have found no variability in the flowers from the same plant, and the white do not acquire a purple tinge in fading; yet, strange to say, Mr. Cartwright sent three dry specimens with a white flower and a purple one issuing at the same time from the same shoot. It is to be feared that the roots which produced them may have perished after the decapitation.—*W. H.*

7. CROCUS Sibthorpianus ; *varietates.*

C. *Sibthorpianus, v. Stauricus ;* c. parvulo, tun. omnibus membranaceis mollibus pallidè badiis demum lacerè ad basim parallelo-fibrosis, foliaceâ exteriore (ni fallor) prope basim proximâ parum altiùs affixâ, foliis 2-4 vel ultra angustis, scapo nudo, spathâ hyalinâ, bracteâ æquali inferne tubatâ, germine brevi albicante tubo saturatè violaceo, limbo (in sicco) albo intus violascente $\frac{7}{8}$ unc. filamentis $\frac{1}{4}$, antheris semuncialibus stigmata paucifida irregularia fimbriatè dilatata aurantiaca ferè æquantibus. *Variat limbo saturatè violaceo (in sicco) inferne luteo. Ex monte Koolak? seu Gulat? Dagh dicto inter Alpes Trapezunticas.*

——————— *v. pulchricolor ;* limbo saturatè violaceo, inferne luteo. *Ex Olympo Bithynico.*

For these plants and dry specimens of their flowers I am indebted to J. Cartwright, Esq. and the Vice-consul at Trebizond. The Koolak Dagh plants flower in June, and the Olympic in May, on the melting of the snow. If they should prove specifically distinct from the Cretan Sibthorpianus when more fully known, I propose to retain the name pulchricolor as specific, and Stauricus, as subordinate for the whiter flower ; if all three should be found distinct, of course the three names will stand. I cannot perceive the conspicuous yellow throat of the Olympic in the whiter Koulak flowers, and such a diversity is not usual amongst the varieties of one species, but, as far as I can investigate the bulbs in an imperfect state, they appear identical.—*W. H.*

8. CROCUS Suterianus.

C. *Suterianus ;* cormo parvulo in agrestibus, tunicâ præcipuâ (vaginaceâ, puto) durâ glabrâ crustaceo-membranaceâ badiâ a basi medium tenus demum parallelo-lacerè incisâ, proximâ interiore durâ glabrâ integrâ basi regulari c. medio circiter vel infra affixâ, cæteris apiculatis duris obscuris basi dimidiatâ vel magis imperfectâ, quibusdam connatis, foliis angustis, scapo nudo, spathâ bracteâ involvente non tubatâ, pedunculo elongato, perianthio parvo saturatè flavo (in sicco coccineo-aurantiaco) limbo vix ultra semunciali antheras stylo in sicco concolore stigmate paucifido breviores æquante. *Flore verno ex Ancyrarum viciniâ, sæpissimè triflorus.*—W. H.

This new species, at the request of Mr. Cartwright, was kindly obtained for me by Henry Suter, Esq. Vice-consul at Kaisarich in Caramania, from Angora in Anatolia, through the agency of the quarantine doctor at that place, who is, I believe, an Armenian. It was accompanied by bulbs of another small deep yellow Crocus, nearly agreeing in struc-

ture with the lemon-coloured Gargaricus, which is found even on Gargarus with a golden flower. I have the like also from Bithynian Olympus. The Angora bulb has the outer foliaceous coat attached near the base, and not cribrous till four years old in the native specimen. This plant and the lemon-coloured Gargaricus are closely akin to reticulatus, and perhaps may be considered as varieties thereof. Some bulbs similar to the yellow have been sent from Angora said to have a white flower, and one with the coats like pusillus said to have a yellow flower, which in that case must be C. chrysanthus, but I suspect that the white flower really belongs to it. I have ascertained from Mr. Fridwalski that C. chrysanthus grows in company with C. campestris (his C. hybernus) on the low hills at the foot of Rhodope, about five and a half hours walk at a good pace from Philippopolis towards Karlowa, flowering in February.—*W. H.*

9. CROCUS Tournefortianus; *varietates.*

C. *Tournefortianus;* Gay B. F. 25. 220. c. tun. membranaceis submollibus glabris badiis, vaginaceis interioribus prope basim. affixis 1-2 persistentibus inferne demum lacerè parallelo-incisis, foliac. exter. supra medium, cæteris altiùs affixis minoribus, scapo nudo, spatham bracteam non tubatam æquante, tubo breviter exserto limbo sub-vel ultra-unciali subalbo violascente breviter ad basim extus violac. striato fauce lævi pallidè aut vix lutescente, filamentis pall. luteis pubescentibus, antheris cum polline *albis*, stylo subcoccineo stigmatibus multifidis sæpius toto capite antheras superantibus prolapsuris; fl. 1-3 autumnalibus, foliis 4-5 angustis lævibus ortu depressis post anthesin erectioribus. *Habitat ins. Melo; et Thermiam? Flos desiccando purpurascit.*—W. H.

——————— *v. Venereus;* (C. Veneris, Tappeiner apud Poech, Enum. pl. h. cogn. ins. Cypri) Limbo albo (sed ad basim, ut in v. principe, striato, fauce et filamentis saturatiùs luteis, fil. nisi fallor in semisicco, lævibus) cætera conformis. Germine pallido striis sex purpureis, interdum obsolescentibus. *Floret pluviis primis Sept. Oct. solo quàm maximè calcareo inter rupes Papho proximas.*

——————— *v. parvulus;* (C. parvulus, Herbert; supra Croc. Syn. et in Bot. Mag.) *Ex Syriâ fl. nondum viso.*—W.H.

10. De Crocis Addenda.

Having succeeded in obtaining and flowering Crocus Tournefortianus and Clusianus of Gay, which were only known by his descriptions, necessarily very imperfect, from his

dry specimens, I am able to supply the deficiency. C. Tournefortianus was known to Mons. Gay by a specimenfrom Milo; my bulbs sent by Mr. Cartwright, are understood to have come from Thermia, and it is remarkable that the summits of those two islands and Crete, are the only known abodes of C. lævigatus, the autumnal Tournefortianus probably growing at a much less elevation. It proves to be a second species with white anthers like those of C. pulchellus; filaments pale yellow and hairy; the limb of the flower is not violet as Mr. Gay supposed, but white with a blueish blush, and it acquires a much deeper shade of colour when dry. For C. Clusianus I am indebted to the kindness of F. N. Hodgson, Esq. of Manchester and his brother residing at Lisbon. Observing in the geological map that calcareous patches occurred near Lisbon, and a large extent of that formation at Cintra, I sent a rough sketch made from the dry specimen kindly lent to me by Mr. Gay, requesting that the plant might be looked for in September; and it was found plentiful at Cintra, more rare near Lisbon. It produces its flowers and leaves together, having rather the aspect of a darker purple variety of C. odorus Melitensis and longiflorus, but it has the feathery style of C. Pyrenæus, medius, Byzantinus, and speciosus. It is the only Crocus I have seen producing three flowers from one involucre, and that in the wild specimens not unfrequently, and sometimes two of them simultaneously. The leaves are smooth. Flowering early in the autumn it will be a valuable addition to our gardens.

Crocus pulchellus in cultivation has in one year more than doubled the size of its bulbs, and instead of producing only one one-flowered shoot, had in some instances three shoots and some two-flowered, and the flowers of an increased size.

A Crocus unknown to me is to be added to the Synopsis.

C. Carpetanus; Boissier et Reuter Diagn. pl. nov. Hisp. Flowers under the firs in spring on the northern slope of the Sierra da Guadarama in Spain, and is perhaps identical with the C. vernus of Brotero found in Beira and Entre M. y D. Its coats are reticulate, margin of the leaves serrated, tube much longer than the spathe, limb pale lilac with throat white and smooth, stigma multifid (each lobe three or four-split) pale *violet* with darker stripes.

I have not yet been able to obtain this plant.

As far as I can learn, C. vernus inhabits elevated flats on

Jurassic limestone or oolite ; where it ceases, the yellow Crocus lagenæflorus in its varieties inhabits the Silurian schist and limestone of the Balkan. C. Clusianus of Portugal and Fleischerianus of Smyrna will be found on the Hippurite limestone ; the former not on the basalt or trap near Lisbon. I have long asked geologists what formation led C. reticulatus albicans from Odessa to S. Podolia, and caused it to run out near Trieste as variegatus, and also in the Crimea. The soil adhering to the Croci from above Damascus, from Crete, Scios, Syra, Tino, Angora, and Simpheropol effervesces with muriatic acid ; that which adheres to reticulatus albicans of the steppes in Wallachia whither it descends from S. Podolia, and round reticulatus variegatus of Istria, does not effervesce, but looks like the crumbling sour blackish earth which often covers chalk. The cloth-of-gold reticulatus inhabits the poorest slopes of Tauria. Speciosus, as well as Byzantinus, chooses the most fertile soil of the hills in shade, seeking protection, I imagine, rather from summer rains, than sun. Crocus ends with the calcareous ridge of Taurus towards Diarbekir, and is cut off by the volcanic rocks from Armenia. It is not found in Kurdistan, Mesopotamia, Persia, Daghestan, or Shirvan, but follows the calcareous line by Tifflis and Elizabethpol to Lenkeran on the Caspian, where C. Boryanus of the red earth on chalk near Navarino and Modon, Cephalonia, Sta. Maura, and Dodona in Albania, re-appears. In Italy and Sta. Maura Crocus is found on tufa, but under what circumstances in relation to the calcareous formation remains to be enquired. Zante, consisting mainly of Apennine limestone, seems not to produce Crocus. If found on the Apennine limestone of Italy at all, it does not appear to abound there, nor to exist on the tufa and igneous rocks of the vicinity of Kaisarich in Caramania.

Mr. Kotschy states that he meant Mount Taurus when he was understood to speak of Crocuses near Tabriz, where he now denies their existence, and the plant on the road to Baalbec with a yellow flower in October seems to have been a Sternebergia. C. cancellatus purples over part of the calcareous ridge of Taurus, especially a mountain called Maaden Depessi, and an elevated flat on Bulgar Dagh, a mile and half from the lead mines at Kullak Bogas, the Pylæ Ciliciæ, behind Tarsus, in September.—*W. H.*

11. MAXILLARIA triangulāris.

M. *triangularis;* caulescens, pseudobulbis ovalibus ancipitibus utrinque corrugatosulcatis, foliis ligulatis apice obliquis, floribus solitariis axillaribus ebracteatis, sepalis subæqualibus patentissimis margine in formam triangularem recurvis lateralibus paulo majoribus, petalis conformibus minoribus erectis, labello oblongo ciliato puberulo cum columnâ parallelo emarginato concavo medio verrucâ solitariâ politâ aucto, antherâ conicâ scabrâ.

This is nearly related to the beautiful Maxillaria tenuifolia, and like it is a discovery of Mr. Hartweg's, who found it in the village of Quezaltenango in Guatemala. Its leaves are very much larger than in that species (10 by $1\frac{1}{4}$ inches); the flowers are formed singly in the axils of the imperfect leaves, which precede the appearance of the perfect leaves and terminal pseudo-bulbs of such plants; they are of a rich cinnamon brown gaily mottled with crimson flecks. The sepals which spread widely apart are folded back at their edges into a triangular form. It flowered in the garden of the Horticultural Society in December, 1844.

12. EPIDENDRUM aëridiforme.

Booth in litt.

E. (Spathium) *aeridiforme;* caule folioso tereti, foliis elongato-oblongis obtusis cum mucrone, pedunculo terminali elongato squamis acuminatis vestito, racemi 7-8-flori abbreviati nutantis axi pedunculis breviore, bracteis squamæformibus acutis, sepalis petalisque oblongis coriaceis obtusis his paulò angustioribus, labello carnoso tripartito cordato basi bituberculato laciniis lateralibus oblongis obliquis intermediâ cuneatâ apiculatâ.

"This plant was introduced from Rio in 1839, and added to the collection of Sir Charles Lemon, Bart., M.P., at Carclew, where it flowered in December, 1843, and again about the same time the following year, when the accompanying figure was made of it. In habit and mode of growth it bears some resemblance to *Ep. nutans*, as well as to *Ep. patens*, agreeing partly with the former in foliage, and with the latter in having a deeply-divided 3-lobed labellum, but widely differing in other respects from either. *Roots* round and straggling, ash-coloured, thick and fleshy, partly terrestrial, but more generally, I suspect, adhering for support to the stem of any tree that may be near it. *Stem* erect, nearly

round, deep shining green, lengthening at the top into a kind of two-edged drooping stalk, covered by numerous thin oblong acuminate *bracts* of a pale yellowish green, spotted and tinged with brownish red at the point, and bearing a loose panicle of dingy coloured flowers at the extremity. *Leaves* alternate, thick and rigid, clasping the stem at the base, much recurved and twisted, with an obtuse remarginate point. They vary from six to eight inches in length, and an inch, or an inch and a half in breadth, and are of a deep shining green, marked in several places with brown-coloured blotches. *Panicle* consisting of eight or nine brownish green flowers, with their faces all turned one way, and remarkably sweet-scented in the day time. *Pedicels* upwards of two inches long, round and much curved, of a brownish green at the base, which is furnished with a small acuminate scale, higher coloured and channelled towards the flower. *Sepals* spreading, oblong-lanceolate acute, three-quarters of an inch long and one-quarter of an inch broad, of a dull green, tinged at the points and edges with deep brown; before expansion the outside is of a deep brownish red. *Petals* similar in form and colour to the sepals, but thinner in texture and somewhat narrower. *Labellum* three-lobed, spreading and much recurved, deeply cut. The two lateral lobes taken together form a sort of crescent at the back, with the margin slightly cut and undulated. The middle lobe is much recurved, and has a prominent rib down the centre with a groove on either side. All of them have a fleshy tinge near the outside, but inwardly they are very pale, almost white, as well as the *column* which is slightly curved and tubular, green at the base, enlarging outwardly, and having two small roundish obtuse fleshy processes at the mouth, just above where the column and central lobe of the labellum are united. *Anther case* round, somewhat reniform, four-celled, containing two pair of pollen-masses with their largest end upwards.

"The plant requires the constant heat of a damp stove, and the same treatment as others of its class.

"W. B. Booth."

13. CERADIA furcāta.

In the Garden of his Grace the Duke of Devonshire at Chatsworth there is, or was a few months since, a very singular plant having the appearance of a shrub of coral, leafless, spreading its short leather-coated branches upwards like a candelabra, and decorated with broad vivid patches of the scarlet lichen called Dufourea flammea. It had been received from the west coast of Africa, and indicated a dry and sterile climate.

Early in December last I received from Dr. Maclagan of Edinburgh a dead branch of the same plant, with its skin overrun with a small crustaceous lichen; it had been brought from Ichaboe by the wife of a ship's Captain, who went to the island (in search, I presume, of guano) and who reported that it yielded Olibanum, a fragrant gum-resin burned as frankincense. The branches in fact had transparent tears of a slightly bitter tender gum-resin sticking to their wounds, but the resin when burned was totally destitute of fragrance, and evidently had nothing to do with any of the drugs to which the name of Olibanum has been applied.

The total absence of foliage, and the singular aspect of the branches, rendered it impossible even to guess what manner of plant this curious production might be. But the other day it appeared at a meeting of the Horticultural Society in leaf and flower, from Messrs. Rollissons, the eminent nurserymen of Tooting. It then proved to be a plant of the Composite order, and nearly related to those fleshy-stemmed shrubs from the Cape of Good Hope, which were formerly called Cacalias, but are now referred to the genus Kleinia. At the summit of the rugged branches grows a cluster of spathulate bright green veinless somewhat succulent leaves, and from their axils a few solitary flower-heads of a pale yellow colour, placed on stalks scarcely so long as the leaves.

It is not, however, a Kleinia, nor does it belong to any genus hitherto defined; but is a member of the division called by DeCandolle ERECHTHITEÆ. It differs from *Faujasia* in the want of a calyculus, and in its abundant pappus; from *Eriothrix* in its involucre not being leafy;

from *Stilpnogyne* in all the achænia bearing pappus; from *Erechthites* in the achænia not being rostrate, in the pappus being rough, in the florets of the ray not being toothed, and in the branches of the style not being terminated by a cone; and finally, from *Cremocephalum* in the involucrum not being many leaved and calyculate, the achænia not being ribbed, and the receptacle not being fringed and thickened at the base. It is possible, however, that some of the plants doubtfully referred by DeCandolle to Kleinia may belong to the same genus, especially his K. acaulis and subradiata.

It may be named Ceradia, in allusion to the horned appearance of its branches, and thus defined.

CERADIA.

(*κερας, κεραδος.*)

Capitulum pauciflorum. eradiatum, heterogamum. Receptaculum planum, levissimè alveolatum. Involucrum 1-seriale, pentaphyllum, basi nudum; foliolis basi carnosis. Flores radii foliolis oppositi et breviores, fœminei, achænio oblongo tereti pubescente, pappo multiseriato setoso scabro, corollâ filiformi truncatâ stylo breviore; ramis styli linearibus obtusis. Flores disci masculi, foliolis longiores, achænio lineari inani, pappo minore subdeciduo, corollæ limbo ventricoso 5-dentato, stylo filiformi truncato, antheris basi muticis.

1. C. *furcata.* Rami carnosi, cornuti, furcati, apice foliati. Folia fasciculata, spathulata, obtusa, in petiolum angustata, avenia, glabra. Pedunculi solitarii, nudi, foliis paulo breviores. Involucri foliola ovata, margine membranacea.

14. PITCAIRNIA ringens.

Link, Klotzsch & Otto, Icones plantarum, t. 25.

P. *ringens*; " caule globoso-incrassato; foliis linearibus, longissimis, acuminatis, integerrimis, glabris, basi dilatatis, spinoso-ciliatis; scapo bracteato, simplici, procero, erecto, bracteisque lana villosa, secedente vestito; floribus spicatis, roseo-coccineis, incurvo-subcompressis, glabris, basi pedicellisque pubescentibus; perigonii foliolis basi nudis."

Introduced by the late Duke of Bedford, and sent from Woburn to the Botanic Garden, Berlin, with a statement that

it came from Demerara; but considering the negligent way in which the collection at Woburn has been managed, this cannot be relied upon. It is a stove plant of great beauty, with spikes of fine long crimson flowers.

15. LENNĔA robinioides.

Link, Klotzsch, & Otto, Icones plantarum, t. 26.

"LENNEA N. Calyx urceolato-campanulatus, subbilabiatus, labio superiore breviore, recto, bidentato, inferiore tridentato, patente, subincurvo, dentibus acutis. Corollæ papilionaceæ vexillum obcordatum, convexiusculum, breviter unguiculatum, patentissimum, alas liberas longitudinaliter subdimidiato-conduplicatas et carinam ecalcaratam vix superans. Stamina 10, monadelpha; antheræ breves, obtusæ, conformes. Ovarium subsessile, supra ad basin profunde sulcatum, tri-quadri-ovulatum. Stylus filiformis, apice involutus, supra, germineque usque ad apicem linea longitudinali pilosa vestitus; stigma capitellatum. Legumen . . . Arbor? mexicana, glabra, Robiniæ facie; foliis impari-pinnatis, distichis; stipulis liberis, deciduis, subulatis; foliolis 4—5 jugis, basi aculeato-stipellatis; racemis axillaribus, simplicibus, pendulis; floribus parvis, roseis, calycibusque glabris; pedicellis basi articulatis, bractea persistente munitis."

"L. *robinioides*; glabra; foliolis quadri quinque-jugis cum impari, ellipticis, lutescenti-viridibus, membranaceis, apice retuso-marginatis; racemis solitariis, calycis dentibus acutis, margine puberulis."

The seeds of this greenhouse shrub were sent by Deppe and Schiede to the Royal Botanic Garden, Berlin, where the plant has flowered, and proved to be, in the opinion of Dr. Klotzsch, a new genus of the tribe of Loteæ. It has small pinnated leaves, and clusters of pretty drooping crimson flowers. It loses its leaves in the winter, and grows very well in the open air during summer; but as it flowers in May, or even earlier, it can only be treated as a greenhouse plant.

16. ECHEVERIA bracteolāta.

Link, Klotzsch, & Otto, Icones plantarum, t. 27.

"E. *bracteolata*; foliis alternis, carnosis, spathulatis, breviter acutis, patentibus, longitudinaliter excavatis, supra glaucescenti viridibus, subtus albido-glaucescentibus, in apice ramorum confertis; racemis axillaribus, simplicibus, subinde profunde furcatis; bracteis carnosis, linearispathulatis, acutis, sessilibus, basi gibbo acuto productis; floribus secundis, pedicellatis; pedicellis bibracteolatis; corollis campanulatourceolatis, e flavido coccineis."

For the introduction of this plant we are indebted to Mr.

Edward Otto, who sent it to Berlin from the Caraccas in 1840. He found it in the Quebrada de Chacaito, near Chacao, at the elevation of 4500 feet above the sea, on the banks of a little stream. The foliage is bright green, the flowers reddish yellow, the habit that of Echeveria gibbiflora ; it is not handsome enough for decoration.

17. SALVIA tubiformis.

Link, Klotzsch, & Otto, Icones Plantarum, t. 28.

S. *tubiformis;* " caule suffruticoso, erecto, petiolisque pubescente-villosis ; foliis membranaceis, deflexis, suborbiculari-ovatis, acutis basi cordatis, supra glabris, rugosis, convexiusculis, margine crenato-serratis, ciliatis, subtus in nervis breviter pilosis, superioribus breviter, inferioribus longe petiolatis, floralibus deciduis, ovato-acuminatis, subtus pilosis ; racemis simplicibus ; verticillastris 10-12 floris ; calycibus longis, tubulosis, striatis, piloso-glandulosis, labio superiore integro dentibusque labii inferioris setosis ; corollis puniceis, calyce sexies longioribus, extus villosis, labiis subæqualibus, superiore recto, emarginato, inferioris lobis rotundatis, minutissime denticulatis, lateralibus abbreviatis, deflexis, medio oblongo, patente ; genitalibus longe exsertis ; stylis versus apicem pilosis ; lobis stigmatis valde inæquilongis."

This is a handsome scarlet-flowered Sage, sent from Mexico by Deppe and Schiede, and raised in the Berlin garden. It grows to the height of five feet, is evergreen, requires a greenhouse in winter, but is said to do well when bedded out. If it flowers freely, and does not become weedy, it will be worth having.

18. OXALIS discŏlor.

Link, Klotzsch, & Otto, Icones Plantarum, t. 29.

O. *discolor ;* " acaulis, bulbosa ; bulbo simplici ; foliis ternatis, foliolis carnosulis, late obovato-obcordatis, supra olivaceo-viridibus, glabris, subtus violaceo-sanguineis petiolisque adpresse-pubescentibus ; scapo bi-trifloro, sparsim piloso, foliis longiore ; sepalis oblongis, adpresse pilosis, subacutis, apice biglandulosis, corolla triplo brevioribus ; corolla saturate rosea, in fundo dilute flavida, viridi-striata ; staminibus pubescenti-scabris, longioribus medio dentatis ; stylis brevissimis glabris."

Flowers violet tinged with crimson, and about the size of those of O. Deppei. Leaves green above, with a dark arrow-headed stain, crimson underneath. Its bulbs were found among moss in unpacking some Mammillarias from Mexico in the Berlin garden. It is rather pretty.

19. SCELOCHILUS Ottonis.

Link, Klotzsch & Otto, Icones plantarum, t. 31.

SCELOCHILUS (Klotzsch in Otto et Dietrich Gartenzeitung, 1841. p. 261.)
"Perigonii conniventis foliola exteriora angusta, navicularia, carinata, basi subcohærentia, lateralia labello supposita, in unicum connata, basi in calcar obtusum, breve producta; interiora latiora, libera. Labellum integrum, supra basin columna continuum, basi brevissime bifidum, liberum, disco calloso, puberulo, longitudinaliter bicostato, antice bidentato, dentibus obtusis, conniventibus; costis infra medium bicornutis; lamina apice emarginata, subexserta. Columna semiteres, nuda, labello subduplo brevior. Anthera semibilocularis. Pollinia 2, sphærica, solida, caudicula lineari instructa, glandula parva, obovata.——Herba caracasana, epiphyta; rhizomate cæspitoso; pseudobulbis subnullis; foliis solitariis, coriaceis, carinatis, basi vaginis squamæformibus, conduplicatis, involucratis; racemo radicali; floribus compressis, flavidis.

S. *Ottonis;* foliis oblongis, coriaceis, læte-viridibus, margine acutis, subtortuosis, apice conduplicato-acutissimis, recurvis; racemo radicali subramoso, foliis parum longiore; foliolis perigonii interioribus obovatis, obtusis, intus longitudinaliter purpureo-striatis, sparsim pilosis."

This new genus of Orchidaceous epiphytes has been found in the Caraccas by Mr. Edward Otto, and by him sent to the Royal Botanic Garden, Berlin, where it has flowered. It occurred on the stems of trees in dense forests, 5,600 feet above the level of the sea. The habit of the plant is that of Burlingtonia, to which it approaches very nearly. The flowers are yellow, rather more than half an inch long, and do not spread flat, but are half closed up.

20. TILLANDSIA vitellīna.

Link, Klotzsch & Otto, Icones plantarum, t. 40.

T. *vitellina;* "subacaulis; foliis latis, oblongo-lanceolatis, acuminatis, subcoriaceis, integerrimis, læte-viridibus, utrinque glaberrimis; spica multiflora terminali, subramosa, pendula; floribus sessilibus, bracteis parvis, foliaceis suffultis; perigonii foliolis exterioribus calycinis saturate viridibus, interioribus longioribus vitellinis, apice dilatatis, patentibus; genitalibus inclusis; filamentis subulatis; germine pyramidali-trigono; stylo subnullo; stigmate trilobo, lobis linearibus divaricatis; ovulis apice papposo-comosis."

A smooth-leaved stove plant, with the habit of a small Pine-apple, and little yellow flowers growing in a nodding slightly branched spike. This also is one of Mr. Otto's discoveries, having been found by him in Venezuela, growing

on the branches of a large tree called *Zumang de Guere*, which appears to be the Inga cinerea of Humboldt. It has flowered in the Royal Botanic Garden, Berlin.

21. EPIDENDRUM marginatum.

Link, Klotzsch & Otto, Icones plantarum, t. 36.

This is the Epidendrum radiatum figured at plate 45, of our volume for 1844.

22. SPHÆROTELE coccinea.

Link, Klotzsch & Otto, Icones plantarum, t. 38.

This is Stenomesson coccineum.

23. PHÆDRANASSA chloracra.

W. Herbert.

Phædranassa; *Herbert.* Amaryllideæ; § Hippeastriformes. *Germen* deflexum trigonè oblongum apice constricto; *tubus* crassus decurvus latere inferiore breviore sexcostato-compactus profundè sexsulcatus ore angustato; *limbus* pendulus laciniis spatulatis convolutis, sepalis inferne margine fistulæformiter convoluto superne laminâ canaliculatè explanatâ, petalis subcanaliculatis laminâ latiore; *filamenta* complanata inferne gradatim latiora infra tubi faucem pariter inserta conspicuè decurrentia recta, superiora tria breviora, inferiora producta; *antheræ* breves versatiles infra medium affixæ; *stylus* rectus stigmate simplici clavato.—— *Plantæ Americanæ bulbo ovato, scapo tereti crassè carnoso angustè fistulato; foliis hysteranthiis petiolatis; ad Stenomesson inter Pancratiformes et Pentlandiam a Phycellâ vergunt.*—W. H.

P. *chloracra;* (*Hæmanthus dubius,* H. et B. Kunth. 1. 281. *Phycella chloracra,* Herb. Am. 155.) caule bipedali, umbellâ circiter sexflorâ, spathâ bracteatâ marcescente, pedunculis subæqualibus $\frac{5}{8}$-$\frac{7}{8}$ unc. viridibus, germine $\frac{5}{16}$ unc. viridi, perianthio ultra-vel subbiunciali rubro laminis viridibus margine pallido subundulato subacutis, stylo perianthium filamentis albis stylum album superantibus, antheris pallidè subluteis, foliis viridibus subacutis petiolo 1-2-unciali laminâ subpedali circiter $2\frac{3}{4}$ uncias latâ.—*W. H.*

24. TIGRIDIA lutea.

Link, Klotzsch & Otto, Icones plantarum, t. 34.

This is apparently the same as Mr. Herbert's *Hydrotænia lobata;* and is a plant of no such beauty as the common Tigridias possess.

25. LOBELIA Texensis, *Raf.*

Link, Klotzsch & Otto, Icones plantarum, t. 33.

L. *Texensis*; "puberula; caule subflexuoso, simplici; foliis sessilibus, oblongo-lanceolatis, patentissimis, acutis, versus apicem attenuatis, margine atro-sanguineo denticulatis, supra læte-viridibus, subtus pallide-viridibus; floribus racemosis, terminalibus; bracteis lanceolatis aut ovatis, acuminatis, sessilibus, pedicello compresso, tortuoso, supra basin bibracteolato, longioribus; lobis calycinis subulatis, atro-purpureis, margine puberulis, inferne acuto-dentatis; labio corollæ inferiore profunde tripartito, lobis angustis, acutis, amœne puniceis; tubo corollæ glabro, coccineo."

This supposed species has been taken up in DeCandolle's Prodromus, and has been figured for the first time in Link, Klotzsch and Otto's *Icones*. It belongs to the same set with L. *fulgens*, *splendens*, and *cardinalis*, and is very much like the last. It is a Mexican species, and will require some protection in winter.

26. MAXILLĀRIA Lyonĭi.

M. *Lyonii*; acaulis, pseudobulbis ovatis compressis lævibus nec angulatis corrugatisve, foliis lineari-lanceolatis apice obliquè emarginatis, floribus solitariis, sepalis petalisque oblongis obtusis striatis, labello oblongo retuso emarginato intra apicem scabro, tuberculo oblongo in medio prope basin.

A little species imported from Mexico by J. C. Lyons, Esq. of Ladiston, near Mullingar. It has very narrow grassy leaves, and ovate smooth somewhat glaucous pseudobulbs. The flowers are dull purplish brown, very slightly bordered with a yellow tint.

27. HELCIA sanguinolenta.

Among the unexamined plants collected by Mr. Hartweg for the Horticultural Society, was a plant supposed to be a species of Trichopilia, of which it has entirely the habit, collected at Paccha, a miserable village in the Andes of Guayaquil. Having now flowered, I am able to state that although it certainly approaches nearly to that genus, yet it is in reality an entirely new form. Instead of its column being rolled up in the labellum, it stands erect and clear of it. Instead of the anther having but one cell, it has two. Instead of the anther-

bed having two lateral lacerated processes, it is surrounded by a deep fringed border. Finally, instead of the lip being perfectly smooth, continuous, and destitute of all appendages at the base, it is contracted about the middle, below the contraction furnished with a pair of thick fleshy lobes hollowed out in the middle and standing erect on each side of the column, without however touching it; and the space between those lobes, forming the very base of the lip, is a hollow hairy pit.

Upon looking at this curious apparatus in front, the anther and column look like an old-fashioned head-dress peeping over one of those starched high collars, such as ladies wore in the days of Queen Elizabeth; or through a horse collar decorated with gaudy ribbons; and this has led to the name, which has been fashioned out of Helcium, a word said to mean the collar of a horse, though; considering its obvious derivation, one would rather have imagined it to signify his traces.

The following character will sufficiently indicate the peculiarity of this new genus.

HELCIA. *Sepala & petala* coriacea, conformia, patula. *Labellum* patulum, membranaceum, planum, medio constrictum, basi utrinque appendice carnosâ truncatâ medio foveatâ in lineas duas breves elevatas procurrente auctum, ipsa basi excavatum pilosum. Columna libera teres, clinandrio erecto undique fimbriato. Anthera carnosa, in pileum solidum obtusum producta, 2-locularis. Pollinia 2, postice excavata, caudiculâ cuneatâ, glandulâ parvâ ovali.— —Herba *pseudobulbosa*, foliis *solitariis*, *coriaceis*, *undulatis*, pedunculis *radicalibus*.

H. *sanguinolenta*. Pseudobulbi ovati, elongati, subteretes. Folia 4-6 pollicaria, undulata, basi in petiolum canaliculatum angustata. Pedunculus pseudobulbis brevior, uniflorus, bibracteatus. Sepala et petala olivacea, fuscosanguineo maculata. Labellum album striis sanguinolentis, obovatum, emarginatum, appendicibus luteis denticulatis striatis.

The relationship of this plant is evidently greatest to Trichopilia. It is however also an associate of Aspasia, from which it differs in not having the lip united to the column, and in its deep-fringed anther-bed. All these are stationed in a subdivision of Vandeæ, to which I propose to give the name of Brassidæ.

27. GESNĒRA vestīta.

Bentham in litt.

G. *vestita;* fruticosa ramis pilosis, foliis ternatim verticillatis petiolatis ovato-oblongis basi angustatis supra dense hirsutis subtus molliter villosissimis canescentibus, pedunculis axillaribus brevissimis in pedicellos 3 unifloros elongatos partitis, calycis lobis lineari-subulatis, corolla cylindracea basi contracta lobis 5 rotundatis æqualibus. *G. molli*, H.B.K. proxima.—*G. B.*

A shrubby Gesneria, raised from seeds collected by Mr. Hartweg near the village of Tena, in the province of Bogota. The flowers are orange, mottled on the lobes of the corolla, and appear to be produced more abundantly in their wild state than at present under cultivation. It is not by any means a showy species, but is a very distinct one.

28. HYPOCYRTA discŏlor.

H. *discolor;* foliis ovalibus longè petiolatis glabriusculis integerrimis basi obliquis, floribus solitariis, calycis laciniis ovatis imbricatis discoloribus, corollâ villosâ duplò longiore limbo parvo erecto, glandulâ maximâ annulo nullo.

This plant was exhibited the other day at the meeting of the Horticultural Society, by T. G. Loraine, Esq., under the name of Columnea zebrina, a name which I cannot find in books, and which cannot possibly relate to it. The genus to which it belongs is Hypocyrta, and it is in fact closely allied to H. aggregata, from which it differs in its smooth long-stalked leaves, large calyx, and smaller solitary flowers. The latter are shaggy with hair, dull yellow, and about twice as long as the dark purple calyx.

29. BROWNĔA Arīza.

Bentham in litt.

B. *Ariza;* "foliis 6-8-jugis (v. numerosioribus ?) oblongo-lanceolatis longe cuspidatis basi plerique angustatis, jugorum infimorum brevioribus basi cordatis floribus dense capitato-spicatis, bracteolis connatis extus tomentosis calycis tubum subtriplo superantibus, staminibus 11 corollam vix æquantibus a basi liberis."

"Near Brownea grandiceps, but the bracts, as well as the individual flowers, are larger; the proportion of the parts is different, and the stamens are entirely free."—G. B.

This is a tree 30 or 40 feet high, from the woods near Guaduas in the province of Bogota, found at an elevation of 4,000 feet, and known under the name of Ariza. The flowers are produced at the points of the shoots, and taken in one mass in a perfect specimen, are five to six inches across, of the richest scarlet, and continue to unfold for several weeks in succession. A few plants have been raised in the garden of the Horticultural Society of London, from seeds brought home by Mr. Hartweg.

30. RHYNCHOPĔRA pedunculāta.

Link, Klotzsch & Otto, Ic. pl. 2. 103. *t.* 41.

This is a new species of Pleurothallis, allied to P. Mathewsii and some others of the same section. Mr. Edward Otto is said to have sent it from the Caraccas.

31. CATACHÆTUM recurvātum.

Link, Klotzsch & Otto, Ic. pl. 2. 105. *t.* 42.

This is Catasetum planiceps, figured in our volume for 1843, t. 9 ; but its flowers are perfectly green.

32. PACHYPHYTUM bracteosum.

Link, Klotzsch & Otto, Ic. pl. 2. 107. *t.* 43.

1. PACHYPHYTUM. Calyx campanulatus, quinquepartitus, laciniis inæqualibus, foliiformibus, corollam superantibus. Corolla perigyna, quinquepartita, hypocraterimorpha, limbi lobis patentissimis, in fauce ad marginem dilatato involutis, cucullato-bilobis. Stamina decem, quorum quinque calyci, quinque petalis imposita, æquilonga, exserta. Squamulæ nullæ. Germina quinque, libera, unilocularia, ovulis ad suturam ventralem plurimis. Capsulæ folliculares quinque, in stylos subulatos attenuatæ, liberæ, intus longitudinaliter dehiscentes, polyspermæ. Semina minima, elongato-scobiformia. Suffrutex mexicanus, carnosus, glaucescenti-albidus. Caulis brevis, crassus. Folia rosulata, magna, obovato-cuneiformia, crassa, carnosa, obtuse apiculata. Flores secundi, dense spicati, bracteati, spica cernua ; bracteis magnis, crassis, obovatis, brevissime acutis, basi sagittatis, unilateraliter bifariam imbricatis. Corollæ limbus coccineus.

P. *bracteosum* ; foliis rosulatis, obovato-cuneiformibus, crassis, carnosis, obtuse-apiculatis ; spica procera, axillari, versus apicem cernua, bracteis magnis, crassis, obovatis, brevissime acutis, sessilibus, basi sagittatis

vestita; floribus secundis, breviter pedicellatis; calycis laciniis elongatis, brevissime acutis, corolla longioribus; corollæ limbo coccineo; antheris flavidis, exsertis; stigmatibus capitatis viridibus."

According to the authors of this work, this new genus is next Cotyledon and Pistorinia; but I cannot perceive in what it differs from Echeveria, of which it is to all appearance a species, with a very large calyx. It has beautiful glaucous foliage, and must be regarded as a handsome addition to the collection of succulent plants. The corolla is crimson, and shorter than the glaucous calyx.

33. HYBANTHĒRA cordifolia.

Link, Klotzsch & Otto, Ic. pl. 2. 109. *t.* 44.

H. *cordifolia*; "foliis magnis, cordato-ovatis, eglandulosis, breviter acutis; calycibus sulphureis, purpureo-marginatis; corollis magnis, flavis; pedunculis pedicellisque purpereis."

A twining greenhouse herbaceous plant, with the habit of a Gonolobus, the flowers being greenish yellow, about the size of a shilling, and collected in umbels. It was received at Berlin under the name of Echites sinensis; but its native country is not certainly known.

34. EPIDENDRUM basilāre.

Link, Klotzsch & Otto, Ic. pl. 2. p. 111. *t.* 45.

A synonym of the E. Stamfordianum of Mr. Bateman.

35. STROBILORHACHIS glābra.

Link, Klotzsch, & Otto, Ic. pl. 2. 117. *t.* 48.

1. Strobilorhachis (*Klotzsch in Otto und Dietrich Gartenzeitung*, vii. *p.* 307.); calyx quinquepartitus, subæqualis, basi bibracteatus. Corolla hypogyna, bilabiata, tubo longo, angusto, subincurvo, fauce ampliato, nudo, limbo personato, magis dilatato, labio superiori semibifido, marginibus lateralibus reflexis, labio inferiori deflexo, trifido. Stamina corollæ tubo inserta, quatuor, subæquilonga cum quinti rudimento; antheræ uniloculares, subinclusæ, apice barbatæ, connatæ. Ovarium pyramidale, biloculare, loculis biovulatis. Stylus simplex, versus apicem hirsutus. Stigma infundibuliforme, inæqualiter bilobum. Capsula sessilis, bilocularis, tetrasperma, loculicide bivalvis: valvis medio septiferis. Semina compressa, subtilissime muricata, adscendentia; funi-

culis umbilicalibus uncinatis.——Frutices brasiliensis. Rami teretes, foliis oppositis, coriaceis. Inflorescentia terminalis, spicata, strobilacea. Flores lutei, tegmentis persistentibus maximis suffulti. Tegmenta quadrifariam imbricata.

2. St. *glabra ;* ramulis glabris ; foliis oblongis, subacutis, coriaceis, glabris, nitidis, penninerviis, basi in petiolum attenuatis ; floribus luteis, spicatis, terminalibus, tegmentis persistentibus, nitidis maximis, integerrimis, saturate viridibus, obovatis, acutis, convexiusculis, carinatis ; calycibus parvis, quinquepartitis, inæqualibus, albidis, laciniis lanceolatis, acutis, basi bracteis duabus, minimis, oppositis, linearibus, acutis, convexiusculis, carinatis, albidis, vestitis ; corollis bilabiatis, tubo angusto, longo, incurvo, fauce oblique ampliato, limbo dilatato, labio superiori semibifido : lobis obtusis, emarginatis, marginibus lateralibus reflexis, labio inferiori deflexo, trifido, lobis obtuse-emarginatis, lateralibus subbrevioribus reflexis ; filamentis duobus inferioribus lanato-villosis, superioribus glabris."

A yellow-flowered Brazilian Acanthaceous plant, with the appearance of an Aphelandra, to which it approaches very nearly. It appears in fact to differ from that genus in little except the upper lip of the corolla being broad and reflexed, instead of narrow and inflexed, and in the lateral lobes of the lower lip being as large as the middle lip. It is not handsome enough to be worth cultivation in gardens of ornament.

36. The Sections of EPIDENDRUM.

Having in former volumes reduced to their proper places such of the species of Epidendrum as belonged to the sections Amphiglottium, Osmophytum, Encyclium, and Spathium, I now proceed to show what are to be arranged in Hormidium, Diacrium, Epicladium, Lanium, and Aulizeum.

§ HORMIDIUM.

Hormidium, *Lindley in Hooker's Journal of Botany*, 3. 81.

This section includes a little set of creeping species, with true pseudobulbs, sessile (or nearly) flowers, and a lip adnate to the column. They differ from *Aulizeum* and *Osmophytum* in the pseudobulbs, and in the flowers not being in conspicuous racemes ; from Lanium in their flowers not being panicled and woolly ; from Spathium, Amphiglottium, and Euepidendrum in their stems not being leafy.

1. E. *pygmæum* (Hooker's Journal of Botany, 1. 49. t. 118. *E. uniflorum*, Lindl. in Bot. Reg. 1839, misc. 13.) ;

rhizomate moniliformi, foliis brevis lanceolatis subundulatis acutis, floribus solitariis, sepalis petalisque linearibus acuminatis incurvis, labello trilobo columnæ adnato laciniis lateralibus rotundatis erectis intermediâ triangulari acuminatâ, sepalis lateralibus labello suppositis eique adnatis.——*Brazil*——Flowers small, yellowish green. I presume that Brazil is really the native country of this, and that it was a mistake to assign it to Mexico.

2. E. *miserum* (Lindl. in Bot. Reg. 1841, misc. 62.); caulibus ovalibus exuviatis compressis aggregatis, foliis . . . . ., scapo brevissimo subbifloro, spathâ bivalvi pedunculis subæquali membranaceâ, sepalis ovatis acutis, petalis linearibus, labelli trilobi lobis lateralibus rotundatis inconspicuis intermedio truncato emarginato, callis nullis. ——*Mexico*.——Pseudobulbs about half an inch high. The scape, peduncles, and ovaries, taken together, are about the same length. The flowers are a dull, dingy, greenish-brown, not unlike those of E. musciferum.
3. E. *cæspitosum* (Pöppig & Endl. n. g. & sp. pl. 2. t. 101.); caule repente, pseudobulbis cylindricis diphyllis, foliis ovali-lanceolatis acutis, floribus in sinu folii paucis brevissime spicatis aut sessilibus, sepalis subæqualibus lanceolatis, labello integro transverso reniformi lateribus rotundato antice retuso ac breviter apiculato nudo. ——*Peru*.——This appears to differ from E. pygmæum in little, except having a very short middle lobe to the lip.
4. E. *serpens* (Lindl. in Benth. pl. Hartweg, p. 149.); pseudobulbis oblongis 2-3-phyllis, foliis ovato-lanceolatis acutissimis, labello cochleato serrulato lævi, capsula ovali triquetra.——*Peru*.——This must be a pretty plant. The flowers are rather large, and deep violet, and the pseudobulbs so crowded together that they must form a carpet when growing as in their wild state. It is remarkable that no straps appear to be connected with the pollen-masses in this species, but some powdery matter is formed in its stead. It is a mountain plant, creeping among Lichens.

§ DIACRIUM.

Diacrium, *Lindl. l. c.*

This section may at first sight seem to merge in Encyclium; for the chief difference previously pointed out by me,

consists in the stem being fusiform and leafy at the end, which is a small modification of the pseudobulbous condition. But in addition to this, the flowers of E. bicornutum have some peculiarities ; one of which is that the lip is not parallel with the column, and another, that it has two deep pits on the under side, corresponding with the same number of fleshy elevations on the upper side.

1. E. *bidentatum* (Lindl. gen. & sp. orch. p. 98.) ; foliis obovato-lanceolatis apice recurvis supra v. sub pseudobulbum nascentibus, racemo terminali erecto paucifloro, sepalis lanceolatis petalisque angustioribus patentibus, labello semilibero rhomboideo angulis utrinque uni-dentato.——*Mexico*.——The only memorandum I possess regarding this species is a sketch of its flowers, made many years ago from a specimen in Mr. Lambert's possession. It seems very near E. bicornutum, but it has narrow petals, and the side lobes of the lip are little more than projecting teeth.
2. E. *bicornutum* (Hooker, Bot. Mag. t. 3332.) ; foliis linearioblongis obtusis coriaceis, caule corniformi, sepalis ovato-lanceolatis, petalis conformibus latioribus, labelli trilobi lobo medio elongato lanceolato acuto basi altè bilamellato lateralibus obtusiusculis.——*Trinidad, Demerara*.——Flowers large and white, slightly tinged with rose colour. Lip yellow at the base, with some crimson specks on the tongue-like middle lobe. According to Mr. Schomburgk, who found it in Demerara, the petals are also spotted with crimson.

§ EPICLADIUM.

Epicladium, *Lindl. l. c.*

In this section the structure of the flower is exactly that of Encyclium, but the flowers grow out of a great spathe, as in Spathium, and the pseudobulbs are evidently assuming the condition of an ordinary stem.

1. E. *aurantiacum* (Bateman in Bot. Reg. 1838, misc. 11. Orch. Mex. & Guat. t. 12.) ; foliis oblongis planiusculis coriaceis caule clavato diphyllo duplo brevioribus, spathâ maximâ cucullatâ pedunculum longiore, racemo brevi subcernuo densifloro, sepalis petalisque lanceolatis acutis

subæqualibus, labello libero oblongo cucullato basi columnam involvente.——*Mexico, Guatemala.*——Flowers numerous, rich orange colour. Found on exposed rocks on the precipitous brows of ravines, where it is subject to great extremes of heat and cold.

§ LANIUM.

Lanium, *Lindl. l. c.*

Creeping scaly stems throwing up little leafy branches or even pseudobulbs; loosely arranged small long-stalked flowers, more or less covered with down, are the principal characteristics of this section, which has a lip adnate to the column. Its panicled or racemose woolly flowers distinguish it at first sight.

1. E. *microphyllum* (Lindl. in Hooker's Journal, 3. 85.); caule repente squamato, ramulis foliosis, foliis distichis oblongis carnosis canaliculatis acutis serrulatis racemo terminali tomentoso multo brevioribus, bracteis membranaceis pedicellis filiformibus multo brevioribus, ovario tomentoso, sepalis apice aristatis, petalis linearibus, labello oblongo acuto basi bilamellato venis tribus per medium obsoletis.——*Demerara, Berbice.*——A small creeping plant, with woolly dull purple flowers. Messrs. Loddiges flowered it from Schomburgk's Demerara collections, and I have since received it from Mr. Bateman.
2. E. *Avicula* (Lindl. in Hooker's Journal, 3. 85.); caule repente squamato, ramulis pseudo-bulbosis diphyllis, foliis ovatis planis margine lævibus paniculâ tomentosâ multo brevioribus, sepalis lanceolatis acutis tomentosis, petalis linearibus, labello acuto subrhombeo basi bicalloso.——*Brazil.*——The leaves of this curious plant are about an inch long; the panicle between three and four inches. The flowers are small, and when seen from the back may be not unaptly compared to a little bird in full flight.

§ AULIZEUM.

Aulizeum, *Lindl. l. c.*

Among the species whose lip is united to the column, are those which, like E. ciliare, have that organ broken up into

long and beautiful fringes, or at least split into three pieces. They have a long horn-like stem, leafy only at the end, and their flowers invariably grow in racemes. These form the section Aulizeum, along with others of less conspicuous beauty, but similar in those points of structure.

1. E. *ciliare* (Linn. Sp. Pl. 1349. Jacq. Amer. 224. t. 179. f. 89. Swartz. Nov. Act. Ups. 6. 69. Willd. no. 21. Ker in Bot. Reg. t. 784. Gen. & Sp. Orch. no. 18.—*Auliza ciliaris,* Salisb. in Hort. Trans. l. c.); foliis in pseudobulbos geminatim insidentibus, sepalis petalisque linearibus acuminatissimis, labelli trilobi lobis lateralibus setaceo-pectinatis intermedio setaceo brevioribus, spicâ subquinqueflorâ.——*West Indies, and tropical America generally.*——Very near E. cuspidatum, but more slender, and with very delicate fringes to the lip. Sepals and petals very light green. Lip pure white. I have a specimen from Mr. Hartweg, found in the province of Bogota, with a raceme a foot and a half long, and enormous flowers.

2. E. *viscidum* (Lindl. in Bot. Reg. 1840. misc. 190.); caule tereti monophyllo vaginâ alterâ longiore infra folium, folio canaliculato mucronulato, racemo paucifloro, bracteis herbaceis glutinosis carinatis ovarii dimidium æquantibus, petalis sepalisque linearibus acuminatis herbaceis, labelli tripartiti basi bicallosi laciniis lateralibus semirhombeis acuminatis setaceo-fimbriatis intermediâ subulatâ brevioribus, clinandrio cucullato dentato.——*Mexico.*——Nearly allied to E. ciliare, from which its single narrow channelled leaf, smaller flowers, and glutinous bracts distinguish it. The blossoms have a weak smell like Cucumbers.

3. E. *cuspidatum* (Lodd. Bot. Cab. 10. Ker in Bot. Reg. 10. 783. Gen. & Sp. Orch. no. 19.—*Epidendrum ciliare,* Bot. Mag. 463.); foliis in pseudobulbos ternatim insidentibus, sepalis lineari-lanceolatis acuminatis, petalis conformibus latioribus, labelli trilobi lobis lateralibus falcatis laciniatis intermedio lineari subæqualibus, spicâ subtriflorâ.——*West Indies and Mexico.*——Flowers large, pale straw colour; lip with a deep yellow base.

4. E. *viviparum* (Lindl. in Bot. Reg. 1841. misc. 27.); caule fusiformi diphyllo pedunculo squamato pluries breviore, foliis oblongis horizontalibus subundulatis obtusis, ra-

cemo denso paucifloro, bracteis membranaceis canaliculatis ovario cuniculato æqualibus, sepalis petalisque linearibus acutis patentissimis, labelli trilobi basi bicallosi laciniis lateralibus subrotundo-rhomboideis intermedio lineari spathulato acuminato convexo triplò longiore, columnæ cucullo fimbriato.——*Demerara*.—— This species has white flowers closely arranged at the end of a flower-stem two feet long; and the latter when old produces young plants at almost every joint. The flowers have no smell.

5. E. *stenopetalum* (Knowles & Westcott, Floral Cabinet, vol. 2. p. 175.); "pseudobulbis cylindraceo-oblongis; foliis lanceolatis; floribus solitariis; sepalis lanceolatis; petalis angustè linearibus; labello trilobo, lobo medio cuspidato-purpureo, lobis lateralibus subrotundis albidis columnam involventibus."——*Mexico*.——"A delicate and pretty species," to me unknown.
6. E. *clavatum* (Lindl. in Bot. Reg. t. 1870.); caule clavato in pseudobulbum ovale desinente diphyllo, foliis lanceolatis patulis, racemo simplici subæquali, bracteis ovatis canaliculatis acutis ovariis infimis duplò brevioribus, sepalis petalisque lanceolato-linearibus æqualibus, columnâ clavatâ, labelli tripartiti basi bicallosi laciniis lateralibus ovatis subfalcatis margine posteriore denticulato: intermediâ unguiculatâ ovatâ acuminatâ.—— *Cumana*.——Flowers green, with a small white lip.
7. E. *falcatum* (Lindley in Taylor's Annals of Natural History, Feb. 1840. *E. Parkinsonianum*, Hooker in Bot. Mag. Feb. 1840. t. 3778); caule ramoso carnoso membranis laxis imbricatis vaginato, foliis solitariis falcatis canaliculatis acutis, fasciculis florum sessilibus: pedunculis elongatis, sepalis petalisque lineari-lanceolatis patentissimis, labelli tripartiti basi bituberculati laciniis lateralibus oblongis dimidiatis integris intermediâ lineari-lanceolatâ paulò longiore.——*Mexico*.——A very fine species, with fleshy branching short stems, long channelled falcate leaves, and large pale yellowish flowers, springing from within a long pale yellowish-green membranous spathe. In Sir Wm. Hooker's figure only two flowers are represented, but in wild specimens there are four or more to each spathe.
8. E. *aloifolium* (Bateman Orch. Mex. & Guat. t. 25.); "rhizomate repente parcè folioso, caulibus brevibus mo-

nophyllis, floribus 3-5 longè pedicellatis ex axillâ folii ovato-lanceolati crassissimi prodeuntibus, sepalis petalisque conformibus lanceolatis acuminatis explanatis, labelli altè trilobi lobis lateralibus acinaciformibus intermedio paulò longiore setaceo, columnâ labello connatâ. ——*Mexico.*——Very like E. falcatum, but, according to Mr. Bateman, the leaves are more fleshy and longer; in E. aloifolium the flower-stalk is more than twice the length of the sepals, while in E. falcatum it scarcely exceeds them; and in E. aloifolium the lateral and middle lobes of the lip are nearly equal, but in E. falcatum the middle is twice the length of the sides. I have never seen the plant.

9. E. *saxatile* (Lindl. in Hooker's Journal, 3. 84.); caulibus fusiformibus apice diphyllis, foliis lineari-lanceolatis racemo paucifloro brevioribus, floribus membranaceis, sepalis oblongis petalisque filiformibus labello multo minoribus, labelli subrotundi trilobi laciniis rotundatis subrepandis intermediam bilobam reniformem serratam imbricantibus.——*Brazil.*——Whole plant less than six inches high. Flowers membranous, reddish purple, with darker longitudinal streaks, as large as in E. Schomburgkii.

10. E. *rupestre* (Lindl. in Hooker's Journal, 3. 84.); caulibus filiformibus vaginis membranaceis vestitis diphyllis, foliis lanceolatis acutis pedunculo ancipiti æqualibus, racemo cernuo, bracteis membranaceis acuminatis pedicellis brevioribus, sepalis oblongis petalisque linearispathulatis obtusis, labelli trilobi laciniis lateralibus acutis margine postico serratis intermediâ rotundatâ integrâ lineis tribus elevatis rugosis.—— *Peru.* —— Flowers yellow, the size of E. conopseum.

11. E. *Hartwegii* (Lindl. in Plant. Hartw. p. 150); foliis 2 oblongis obtusis coriaceis apice obliquis spicæ rigidæ multifloræ basi spathaceæ caulisque bulbosi teretis longitudine, floribus coriaceis, ovario triquetro clavato, sepalo supremo oblongo obtuso lateralibus acutissimis, petalis obovatis, labello subrotundo æqualiter trilobo basi callo pubescente concavo aucto, ungue et columna brevissimis. ——*Peru.*——This has somewhat the habit of E. variegatum, but the lateral lobes of the lip are very conspicuous, and it is much thinner.

12. E. *parvilabre* (Lindl. in Benth. Pl. Hartw. p. 150.);

folio oblongo suboblique emarginato caule longiore, racemo simplici multifloro cernuo folio multo longiore e spatha erumpente 2-3-phyllo, sepalis oblongis obtusis petalis duplo latioribus lateralibus 5-nerviis, labelli tripartiti laciniis lateralibus falcatis acutissimis intermedia angustissima apice cuneata triloba, axi elevata basi bicallosa.——*Peru.*——This species has a spathe like the species of the § Spathium, but it has pseudobulbs instead of leafy stems.

N. B. *E. collare* (Bot. Reg. 1843. misc. 85.) is better referred to § Osmophytum than to Aulizeum.

§ PSILANTHEMUM.

Psilanthemum, *Klotzsch in L. K. O. ic. pl. 2. p.* 111.

The radical inflorescence alone is a character which distinctly marks this section, for otherwise it is unknown in the genus. The lip is adnate to the column, and is similar in structure to Amphiglottium.

1. E. *Stamfordianum* (Bateman, Orch. Mex. & Guat. t. 11. E. *basilare*, Klotzsch, l. c. t. 45.); pseudobulbis fusiformibus, foliis oblongis obtusis coriaceis basi angustatis, racemo radicali paniculato, sepalis patentibus lanceolatis, petalis duplò angustioribus, labelli tripartiti laciniis planis æquilongis lateralibus oblongis obtusis intermediâ transversâ bilobâ s. emarginatâ fimbriatâ.——*Guatemala.* ——Flowers in a large branched raceme, deliciously fragrant, pale yellow, with a vivid violet spot at the base of the lip. It is found on the coast of Guatemala, in shady very moist lands; and requires an unusually moist climate.

37. APHELANDRA aurantiaca.

Supra t. 12.

M. de Jonghe, of Brussels, has obligingly furnished the following note respecting the origin of this beautiful plant:—

"Lorsqu'au mois de Septembre, 1843, j'eus le plaisir de vous rencontrer à Kew, vous avez bien voulu me permettre de vous addresser, à l'occasion, des indications horticulturales. Cette occasion se présente au sujet d'un article, tiré du *Botanical Register*, et inséré dans le *Gardener's Chronicle*, p. 171. Il y est question d'une plante nouvelle *l'Aphelandra*

aurantiaca. Cette plante remarquable a été apportée, en 1841, du Mexique par les naturalistes M. M. Linden et Funck, voyageurs pour compte du gouvernement Belge. Le seul sujet de cette espèce fut donné en cadeau au Roi Leopold et placée dans les serres du domaine Royal à Laeken près de Bruxelles. La plante y fleurit, pour la 1re fois, au mois de Juillet de 1843, et fut décrit et nommée *Hemisandra aurantiaca,* par le professeur *Scheidweiler.* Envoyée, à cette époque, à l'exposition de fleurs de la Société Linnéenne de Bruxelles, cette superbe plante fut couronnée du 1er prix, comme nouveauté remarquable. Le journal d'horticulture pratique, publié ici, en a fait mention. Les multiplications de cette magnifique nouveauté ayant été données en échange à M. Jacob-Makoy, horticulteur à Liège, ce dernier en a envoyé plusieurs sujets à Mr. Low, à Upper Clapton. C'est sans doute de cet horticulteur que Mr. Henderson en aura acquis un pied qui a obtenu le prix de nouveauté à la société d'horticulture de Londres dont les journaux ont fait mention.

"Je vous autorise à faire tel usage que bon vous semblera des indications précédentes."

38. MAXILLARIA setigera.

M. *setigera*; (Scapigeræ unifloræ) pseudobulbis foliisque Oncidio ampliato similibus, scapis radicalibus unifloris squamis acuminatis subpaleaceis striatis supremâ ovarii longitudine adpressâ, sepalis lanceolatis mento obtuso, petalis linearibus paulò brevioribus apice abruptè setigeris, labello oblongo trilobo piloso laciniâ mediâ oblongâ emarginatâ crispâ lateralibus brevibus obtusis appendice ovatâ in medio, clinandrio fimbriato.

This novelty is from La Guayra, where it was collected for Mr. Barker, to whom I am indebted fór a flower. The leaves and pseudobulbs, *which I have not seen,* are said to be like those of Oncidium ampliatum. The flowers, which grow singly on scaly scapes, like Maxillaria picta, are pale yellow, slightly tinged with pink on the outside. The petals are almost exactly linear, terminating suddenly at the point in a fine bristle. The lip is for the most part white, with a few scattered hairs over all its upper surface; the centre of the upper part is yellow, the sides of the lower part are streaked with crimson veins. The anther-bed is bordered by a fine fringe.

In many respects this approaches Maxillaria splendens, which however is easily known by its long grassy leaves.

39. CROCUS vallecola.

Herbert.

C. *vallecola* ; "scapo involucrato, antheris albis, cormo e minimis, tunicâ præcipuâ tenuissimè membranaceâ fibris parallelis superne confluentibus, interiore in vertice sitâ tenui membranaceâ."—*W. H.*

"Some circumstances have occurred which throw light on the cultivated Crocuses. The native places of C. biflorus commonly called Scotch crocus, of luteus the common yellow, of sulphureus concolor, pallidus, and striatus, of stellaris, and of lacteus penicillatus and concolor are unknown, unless the first should be found, as Bory de St. Vincent states, round the gulph of Ægina. Some seedlings raised from C. lagenæflorus v. lacteus lutescens, a plant of which a few were found in Barton park, Suffolk, at the distance of about 70 yards from the place where C. lagenæflorus aureus is naturalized under the oak trees, have begun to flower at Spofforth. The result is, that three have come like the parent; seven have reverted to lagenæflorus v. aureus, from which they appear to have originated; three are precisely Sabine's lacteus penicillatus, white with blue lines; and one is Sabine's lacteus concolor. It is proved, therefore, that I was right in uniting those plants under lagenæflorus as varieties thereof. It seems that some difference in the soil or subsoil, or the thickness of the sod, and the exposure, caused that change in the race which gave us lacteus lutescens; and that form appears to have been a step to the wider departure into white. About five or six years ago I received from my lamented friend, the Rev. Th. Butt, a bulb of Sabine's C. lagenæflorus pallidus, a plant of which the anthers are sterile, and almost obsolete, and the corolla a little curled. It has now grown into a tuft of bulbs. Last year I observed two or three seedlings close to the tuft, and at this moment there stands one bulb on the edge of the tuft, striped outside like sulphureus striatus, but much paler. Sulphureus concolor, and striatus, and stellaris are all sterile, and none of them stand in the same border with pallidus; but close behind it is a patch of C. reticulatus, the cloth of gold of crocus, by which I conceive that pallidus must have been fertilized. and have thus given birth to this striped

flower. I had long suspected C. sulph. striatus and stellaris of such an origin, as they have not been found except in gardens, though there is in the Banksian herbarium a damaged specimen, which has much affinity to striatus, but differs in the bulb coat, said to have been found by Russell, near Aleppo. I cannot, however, hear of it in that neighbourhood. C. Adamicus, the bluest of the genus, proves to be a native of Caucasus, not, as Mons. Gay imagined, of Tauria.

W. H.

40. BEGONIA stigmōsa.

B. *stigmosa;* caule brevissimo repente, foliis obliquè cordatis acutis indivisis ciliatis subintegris supra maculis quibusdam discoloribus compressis subtus glabriusculis, petiolis ramentaceis, paniculâ subcymosâ, floribus dipetalis, capsulæ alis obtusis alterâ maximâ.

This species was presented by Messrs. Loddiges to the Horticultural Society, under the name of B. stigmata, probably a clerical error for stigmosa; but we do not find it mentioned in the recent enumeration of the genus by Walpers. Its flowers are white, not very large, but produced in cymose panicles. In the presence of ragged scales on the leaf-stalks it resembles *B. manicata;* but it differs in its mode of growth, and in the form of its fruit. Its real position is somewhere in the neighbourhood of the much handsomer B. hydrocotylifolia. Its name alludes to the brownish purple spots with which the leaves are marked.

41. DENDROBĬUM anosmum.

D. *anosmum;* facie ominò D. macrophylli et colore; sepalis ovato-lanceolatis, petalis oblongis planis nec oblongo-lanceolatis undulatis, labello subrotundo acuto.

This is a Philippine plant, which has lately flowered with Messrs Loddiges. Its appearance is very much that of D. macrophyllum, but, 1. its flowers are scentless, and have not the strong odour of rhubarb; 2. they are smaller; 3. all the divisions of the flower are shorter, broader, and even, instead of being undulating. Whether or not it is really a species experience will show; it is at all events a remarkable variety.

42. EPIDENDRUM rufum.

E. *rufum*; pseudobulbis pyriformibus 2-3-phyllis, foliis brevibus lanceolato-ligulatis patentibus scapo paniculato brevioribus, sepalis petalisque ovalibus acutis subcarnosis, labelli trilobi laciniis lateralibus brevibus semi-ovatis intermediâ obovato-oblongâ convexa margine revolutâ apice rotundatâ basi secus axin elevatâ carnosâ, columnâ membranaceo-marginatâ.

This species of the Encyclium division is very near E. flavum, from which it differs in the colour of the flowers, the form of the lip, and the shortness of the leaves. The following memorandum from Mr. Booth, gardener to Sir Charles Lemon, fully explains its history.

"This plant was imported from Rio in 1842, by Lieut. Turner, of H. M. Packet 'Ranger,' and presented to Sir Charles Lemon, Bart., M.P., with whom it flowered at Carclew, in May, 1844. It has a great resemblance both in habit and general appearance to Encyclia patens; but its flowers are very different, and although not so gaudy as some of its brethren, I have no doubt of its proving a desirable plant when well grown. It requires a warm moist atmosphere, and thrives pretty well attached to a block of wood suspended from the rafters of the stove.

"*Pseudo-bulbs* two or three-leaved, pear-shaped, about three inches long, and four inches in circumference, furrowed when old and of a deep-shining green, but almost wholly covered when young with several large pale brown sheathing scales. *Leaves* of a dark green, flat and rigid, erect or slightly spreading and recurved; oblong-lanceolate acute, an inch wide, and from six to eight inches long. *Scape* issuing from the crown of the pseudo-bulb—round and erect, from fifteen to eighteen inches high, with several joints having each a small dark brown acuminate bract, and bearing a profusion of brownish yellow flowers at the top for about a third of its length, arranged in a sort of loose panicle. *Pedicells* round and slender, slightly curved, pale green. *Sepals* spreading oblong lanceolate, blunt at the point, an inch long, and about a quarter of an inch wide—thinnish towards the base, but fleshy outwardly—the upper one curved, the other two slightly twisted and undulated. *Petals* rather shorter than the sepals, and narrower, having their edges somewhat reflexed. *Labellum* three-lobed, curved and deeply divided. The two lateral lobes are small, ovate-

acuminate, and rise erect on either side of the column. The middle lobe has the edges reflexed, and rolled up so as to appear no larger than the sepals, although it is twice their size. At the base is a slightly elevated plate the length of the column and parallel to it. *Column* short-rounded on the upper side, but deeply hollowed beneath; thin, and of a silvery green at the edges, with a semicircular three-pointed depression in which the anther-case is contained. The latter is two-celled, roundish ovate. *Pollen-masses* four, two in each cell, ovate, deep yellow, with a reflexed and slightly bifid caudicula."—*Wm. B. Booth.*

43. SPIRANTHES lobata.

Lindley in Bot. Reg. 1844. *misc.* 9.

"Among some plants received by Sir Charles Lemon, Bart., M.P., in the spring of 1842, from Mr. John Rule, of the Real del Monte Mines, Mexico, were two with long, thick, fleshy, fibrous roots, which shortly afterwards sent up leaves so much resembling the well-known *Stenorhynchus speciosus* as to have been mistaken for that plant, until on flowering, in December, 1843, they proved to be a very different thing; not so showy as *Stenorhynchus*, but more interesting to the botanist as furnishing an additional species to the genus Spiranthes.

"*Leaves* oblong lanceolate acute, spreading round the flower-stem which rises in the centre, slightly marked as if reticulated, but quite smooth, and of a rich green above, very glossy beneath; varying from nine inches to a foot in length, and from two and a half to three inches in width; somewhat undulated at the margin, and hollowed at the base so as to embrace the stem. *Scape* fifteen or eighteen inches high, quite round and hairy, terminating in a spike of about a dozen or more yellowish green flowers, with a thin membranous oblong lanceolate acuminate bract at the base of each, similar in form but much smaller and darker coloured than those which embrace the rest of the stem, and which are at first so closely imbricated as to give it something the appearance of a head of asparagus. *Flowers* curved, rather more than an inch and a half long; the lower part dark green, grooved and densely pubescent. The upper segment is smooth, and of a dull yellowish green, hooked and arched

so as to form a kind of oblong hood, having the edges turned upwards and tapering to a flattened emarginate point. The segments on either side are ovate-oblong, slightly lunate, about the same size as the upper one and similar in colour, but flatter, much recurved and twisted so as to cross one another at the point. The *lip* is thin, but firm, three-lobed and semitransparent, of a yellower green than the other part of the flower, and marked with greenish lines. The two side lobes are curved upwards so as to meet underneath the upper-hooded segment, and form, with the middle lobe, a kind of funnel-shaped tube. All of them are recurved at the margin, particularly the middle one, which is as large as the other two, roundish cordate, ending in a narrow elongated spur, with two roundish-hooked claws. In the centre it is connected with the edges of the *column*, which is nearly as long as the anterior lobes of the lip, narrow, curved, and tapering to a roundish, slightly hollowed, brownish stigma. *Anther-case* arrow-shaped, two-celled, containing a quantity of powdery pollen-masses in each.

"The plant requires the constant heat of the stove, and thrives in a rich loamy soil; kept moist when in a growing state, but dry after the leaves decay."—*Wm. B. Booth.*

44. GALANTHUS reflexus.

Herbert mss.

G. *reflexus*; foliis planis subglaucis $\frac{1}{4}$-$\frac{3}{8}$ unciæ latis, spathâ pedunculum superante, sepalis concavis, petalis brevibus profundè incisis viridi bimaculatis superne reflexis.—*W. H.*

This curious little Snowdrop was sent to the Dean of Manchester by Mr. Lauder, who found it on Mount Gargarus, and transmitted it with Crocus corms from that locality. The flowers are not half the size of those of the common Snowdrop.

45. ODONTOGLOSSUM membranaceum.

Lindl. in Sertum Orchidaceum, sub t. 25.

This charming species has flowered with Messrs. Loddiges. The blossoms are pure white, in the way of O. Rossii; large, and delicately banded concentrically with deep rose colour. They smell like bitter almonds. A figure of it will soon appear in this work.

DEATH OF WM. GRIFFITH, ESQ.

Private letters by the last overland mail have brought the sad intelligence of the decease of this gentleman at Penang, on the 7th of February last, after a few days' illness. The public papers make no mention of the event, but we have ascertained from his family that the news is too true.

In Mr. Griffith Botany has sustained a most serious loss. To a thorough acquaintance with the subject, and much skill as a draftsman, he added a singular power of correct observation, and a perseverance in following out an inquiry into its most subtle ramifications which has never been surpassed. This is universally known to Botanists who have studied his writings, and they will long regret so great a loss to science. Than his observations on Santalum, and on pollen, and his recent curious investigation of the progressive development of Salvinia and Azolla, we have few treatises of more real importance to Vegetable physiology. Besides these, his unpublished papers will, we doubt not, be found a perfect mine of elaborate observation.

It was, we think, about the year 1829 that Mr. Griffith proceeded to India. Soon after his arrival he was placed on the staff of a cavalry regiment quartered in Burma, and there had ample leisure for prosecuting his favourite studies. He was afterwards, under the enlightened administration of the Earl of Auckland, appointed one of the commissioners to examine the Tea districts of Assam; and at a later period was sent by the same distinguished nobleman with that too celebrated expedition to Cabul, so ably conceived, so deplorably marred by the incompetency of agents, and so gloriously vindicated by the armies of Kandahar and Jellalabad.

His last public employment was as the temporary Superintendent of the Botanic Garden, Calcutta, on the occasion of the absence of Dr. Wallich on sick leave. During the short time that he held this appointment he entirely remodelled the establishment, and laid the foundation of most useful changes of a still more extensive nature. At the conclusion of this engagement he received very handsome

letters from the Government and Council of Education, married, and proceeded to Malacca, where his death took place.

He was a man of a warm and ardent temper, eager in the cause of science, and ready to sacrifice all considerations of personal advantage to what he believed to be right. In doing this he, like all men who take a similar course, made some enemies; but he also secured many zealous friends, who will long lament him as one of the brightest luminaries that yet have shone upon the science of India.

Mr. Griffith left behind him enormous collections, part of which are preparing for distribution by Dr. Royle, under the authority of the Honourable Court of Directors of the East India Company.

Annales de la Société Royale d'Agriculture et de Botanique de Gand.

This work, of which we have two numbers before us, is a Botanico-Horticultural Journal by Professor Morren of Ghent, in imitation of some of our English periodicals. It is to include Horticultural and Botanical papers, descriptions of new Belgian Plants, and miscellaneous matters. We shall give extracts from it occasionally, so far as it contains papers interesting to the English reader. The novelties of the first two numbers are as follows:—

46. ONCIDIUM gallopavinum.

Morren, Ann. Soc. Hort. Gand. 1. 13.

O. *gallopavinum*; pseudobulbis ovatis, apice attenuatis; foliis binis, planis, lanceolatis; scapo elongato, spica simplici, 7-10 floribus divaricatis; bracteis minimis, ovato-lanceolatis, acutis, membranaceis; sepalis liberis, ovatis, undulato-concavis, roseo-purpureis; petalis ovato-lanceolatis, roseo-purpureis; labelli lobis lateralibus spathulatis, abbreviatis, rubris, intermedio maximo, elongato, emarginato, obcordato, sinu brevi mucronato, citrino, crista minima, vix bicallosa, tuberculis maximis, rugoso-carunculatis, purpureis, columnæ auriculis alato-explanatis, latis.

This is said to be Mexican; its lip is yellow, the sepals and petals greenish, stained with crimson; but the figure is so very inexact in its details that we cannot form any opinion upon it.

47. CATTLEYA Papeiansiana.

Morren, Ann. Soc. Hort. Gand. p. 57.

C. *Papeiansiana*; floribus solitariis vel binis, longe pedunculatis, erectis; sepalis oblongo-lanceolatis, infernis arcuatis; petalis latioribus oblongo-lanceolatis, obtusiusculis, undulatis, labelli trilobi lobis undato-denticulatis, intermedio cordato, undulato, crispo, per axia sexstriato, emarginato; pseudo-bulbis nullis, caule stricto, foliis binis; lato-lanceolatis, obtusis; emarginatis, carnosis; spatha scariosa.

If this is anything more than a slight variety of C. Loddigesii, why then the species of Orchids may be multiplied *ad infinitum*.

48. CAMELLIA Japonica Halleii.

Morren, Ann. Soc. Hort. Gand. p. 60.

This is surely the well-known C. Jap. imbricata; it is at least so like it that we do not perceive the difference.

49. BEFARIA glauca.

Humb. Bonpl.

This is a very fine thing, figured at t. 7. of M. Morren's work. The plant was received from Tropical America by M. Funck, whose notes on it are as follows :—

" Cette belle éricacée croît dans les montagnes élevées de la république de Venezuela. Je l'ai trouvée aux environs de Caracas où elle commence à se montrer à une elevation de 4000 pieds au-dessus du niveau de la mer, dans les terrains arides, sablonneux et exposés au soleil. Elle fait partie de la végétation subalpine caractérisée par les *Gaultheria coccinea* et *odorata*, les *Weinmannia*, les *Siphocampylus lantanifolius* et les *Andromeda*. Le *Befaria glauca* acquiert la force d'un petit arbre de 15 à 20 pieds de hauteur lorsqu'il est ombragé dans les forêts. Généralement cette espèce disparaît à une élévation de 5 à 6000 pieds pour faire place à la vraie végétation alpine dont les *Befaria ledifolia*, les *Gaylussaccia buxifolia*, les *Vaccinium*, etc. sont les principaux représentants. Le *Befaria glauca* fleurit indistinctement dans toutes les saisons. Par son port gracieux, il ressemble beaucoup à nos jolies azalées qui embellissent nos serres et nos jardins, et il

est certain que cette espèce est susceptible d'être acclimatée comme les rosages et les azalées et que dans peu de temps elle sera un des plus beaux ornements de nos jardins."

The leaves are glaucous, and the flowers are rose-coloured. M. Morren states that M. Jacob Makoy has also raised the Befaria coarctata of Humboldt and Bonpland.

50. PRUNUS Pseudocerasus. ?

Lindl. in Trans. Hort. Soc.

What appears to be this plant, at present so little known in gardens, has produced its fruit in the garden of O. F. Meyrick, Esq. of Bodorgan, to whose gardener, Mr. C. Ewing, we are indebted for a specimen of it.

The fruit is about as large as a sparrow's egg, of a reddish amber colour, and furnished at its point with a conical tumour, such as is found on the Peach called the Têton de Vénus. It is sweet, tender, and very pleasant to eat. Mr. Ewing gives us the following account of it.

"The tree was imported from China some years ago by a merchant in Lancashire—I think from the neighbourhood of Pekin—and is, I imagine, perfectly new to this country. A remarkable circumstance connected with it is that cuttings will strike root as freely as those of a willow; in fact, roots several inches in length protrude at the joints of the stronger branches several feet above the ground, in the same way as roots are produced from the young shoots of a vine. On account of the tree having been kept in a strong heat, however, in order to make it form a large plant, the specimens of fruit sent are inferior to the usual produce.

"There is one great object to recommend the culture of this Cherry; viz. it will stand any hardship in forcing, and it is no difficult thing to have a crop of ripe fruit from it by Christmas day. Moreover, the fruit when well grown is equal to that of the May Duke. The plant altogether has more the appearance of an elm than anything else to which I can compare it."

We are, however, not certain that the plant is really Pr. Pseudocerasus, notwithstanding its general resemblance, and the remarkable tendency to root from the old stems; for the leaves are stiffer, more oblong, and broader, and they have much shorter leaf-stalks: but at present the infor-

mation that we possess on the subject is insufficient to enable us to form a positive opinion as to whether it is distinct or not.

51. NAGELIA denticulata.

This plant, the Cotoneaster denticulata of Mr. Bentham, has all the structure of that genus in its flowers, and much of its habit; but its fruit proves it to be a new genus, which I trust may bear the name of the ingenious Mr. Nägeli, the fellow-worker of Schleiden in Botanical investigation. The fruit is a very pale pink colour, about as large as a pistol ball, with a brittle semi-transparent flesh, and the thin putamen of a Pyrus instead of the hard bony stone of a Cotoneaster. It may be defined as follows—NAGELIA. Petala parva, patula. Stamina 10-15. Carpella 2, dorso calyci adnata, ventre libera, ovulis 2 collateralibus ascendentibus. Pomum sphæroideum, calyce coronatum, carnosum, fragile, endocarpio membranaceo. Semina cuique loculo 2, compressa, castanea, ascendentia. Cotyledones tenues plano-convexæ.—Frutex Cotoneasteris vultu, canescens; sepalis semimembranaceis; petalis calyce longioribus patentibus.

52. SCILLA pubens.

Welwitsch in litteris.

Under this name the Horticultural Society received from the Duke of Palmella's Garden, at Lumiar near Lisbon, a plant which appears undistinguishable from Sc. Peruviana, except by being much smaller in all its parts. The flowers have the same grey-blue colour and corymbose arrangement, with long narrow membranous bracts curving inwards at the end.

53. SCILLA Bertolonii.

Duby Bot. Gall. 465.

This also has been sent from the Lumiar Garden by the Duke of Palmella. Dr. Welwitsch seems to have rightly distinguished it from Sc. italica, to which it is generally referred. It is quite a different thing with a small number

(3-5, or perhaps more) of pale lilac flowers, collected into a loosely arranged raceme, without any of the compactness of Sc. italica, than which its flowers are twice as small. The bracts are as long as the pedicels when the flowers first open, but they soon become shorter by the lengthening of the pedicels. The filaments are linear and almost sterile. Apparently quite a hardy bulb.

54. SCILLA pumila.

Brotero Fl. Lus. 1. 527.

This has also been received with the two last from Dr. Welwitsch under the name of Sc. monophylla. It is a pretty little one-leaved plant, with almost the aspect of a very small Lily of the Valley before it flowers. It bears from 3 to 5 small blue flowers in each raceme, with subulate stamens and yellow pollen.

55. FRITILLARIA lusitanica.

Wikstrom in act. acad. holm. 1821. 2. *p.* 9. *t.* 5. *f.* 1.

This is a curious little hardy bulb, with a stem about six inches high, and flowers intermediate in appearance between F. lutea and Meleagris. The radical leaves are lanceolate, bright green and taper-stalked; those of the stem lanceolate, glaucous and sessile; the flowers are pale dirty reddish yellow inside, and coppery brown externally. It is a very distinct little plant.

56. CARAGĀNA triflora.

C. *triflora;* petiolis spinescentibus, foliolis 4-5-jugis ovalibus obtusis apiculatis viridibus sericeis, pedunculis trifloris foliis brevioribus, floribus pedicellatis, calycibus glabris basi bibracteatis.

This shrub is probably one of the Tartaric Furzes of travellers. It was raised in the garden of the Horticultural Society, from seed communicated by the East India Company, under the name of C. Gerardiana. It is not, however, that species which has solitary flowers and shaggy calyxes, but a species hitherto undescribed, with greenish yellow flowers growing in threes. It is probably quite hardy.

57. BOTANICAL NOMENCLATURE.

No one who has had any experience in the progress of Botany, as a science, can doubt that it has been more impeded in this country by the repulsive appearance of the names that it employs than by any other cause whatever; and that, in fact, this circumstance has proved an invincible obstacle to its becoming the serious occupation of those who are unacquainted with the learned languages, or who, being acquainted with them, are fastidious about euphony, and Greek or Latin purity. So strongly has the author been impressed with the truth of this view, that on many occasions he has endeavoured to substitute English names for the Latin or Greek compounds, by which the Genera of plants are distinguished. Upon turning over the late volumes of the Botanical Register many such instances will be found; as for example—

Peach-Myrtle	*for*	Hypocalymma,
Swan-neck	,,	Cycnoches,
Gritberry	,,	Comarostaphylis,
Red-coat	,,	Erythrochiton,
Pouch-bell	,,	Glossocomia,
Snowwort	,,	Niphæa,
Glory-tree	,,	Clerodendron,
Stylewort	,,	Stylidium,
Hair-orchis	,,	Trichosma,
Reed-orchis	,,	Arundina.

And so on, in imitation of the well-known and usual English words Houndstongue, Loosestrife, Bugloss, Soapwort, Harebell, &c. He cannot, however, boast of any success in these feeble attempts at reforming a great evil, nor perhaps ought he to have expected it. If these names are not universally adopted, it is to be suspected that the circumstance is traceable to the indifference of the public to such partial and inconsiderable changes, which are unseen in the ocean of Botanical nomenclature. That they are important must be admitted; that the person most careless as to the difficulties of articulation would prefer to speak of a Fringe-Myrtle rather than of a Chamælaucium, or of a Gritberry than of a Comarostaphylis, will probably be allowed on all hands; and therefore the author does not confess discouragement at failure; but would rather invite suggestions as to the most probable means of success.

His own opinion is in favour of a very carefully considered Catalogue, which should contain all the names of all the plants either wild or in cultivation in this country, the first name being in good English, and the second in the usual Latin or Greek. If this were accomplished there would at once be a recognized standard to which reference could always be made in cases of uncertainty; and which might be consulted by buyers and sellers, with whom the difficulty of exchanging Latin names for English ones is found in practice to be very great. Among Nurserymen it is almost invariably the custom to sell plants by their Latin names, because such names are settled, and precise, and moreover because such plants are almost always asked for by those names; and it is doubtful whether it would be possible to buy the Comarostaphylis arbutoides by its English name of Arbutus-like Gritberry. But this difficulty would be at once overcome by such a catalogue as is here suggested.

It may be said that the object is already attained by Catalogues like those of Loudon, Sweet, &c. But the slightest examination of such works shows that they do not meet the difficulty in any considerable degree; for example at p. 48 of Loudon's Hortus Britannicus, Exacum is translated Exacum, Contoubea Contoubea, Microcale Microcale, Pladera Pladera, Mitrasacme Mitrasacme, and so on; Penæa marginata is called the marginated Penæa, Manettia Lygistum is Englished by the Lygistum Manettia. Such instances, and all our so-called English catalogues are filled with them, are so absurd, that the unwillingness of the public to adopt them is a proof of the public good sense. Not that translation is either necessary or desirable in all cases. Many Latin names have, from custom, been adopted into the English language, and no wisdom would be shewn in attempting to alter such words as Dahlia, Crocus, Ixia, or even Orchis. Others again are so easily sounded, and so much in harmony with the English tongue, that nothing could possibly be gained by interfering with them; such as Penæa, Hugonia, Parkia, Mimosa, Arbutus, &c. And, finally, there is a large class of scientific words which are best Englished by an alteration of their foreign terminations; for example, Melanthium might be changed to Melanth; Desmanthus to Desmanth; Lecythis to Lecyth; Myrospermum to Myrosperm; and such an alteration would at once possess the great advantage of rendering English plural terminations possible; Melanthiums,

Desmanthuses, Lecythises, &c. sound offensively to classical ears; Melanthia, Desmanthi, Lecythides, are, if not pedantic, at least beyond the skill of uneducated readers; but Desmanths, Melanths, and Lecyths are formed by the ordinary English plural termination without difficulty.

It is however to be feared that it will be long before these views are carried out in such a manner as to ensure their adoption. But in the mean while a commencement of the plan is practicable, and the author hopes will meet with support. The names by which the great groups of plants are known are few in number, and very often in use. There is certainly no reason why we should not at once English them; the practice indeed is already adopted to some extent by the substitution of the words Monocotyledons, Dicotyledons, Exogens, Endogens, Cryptogams, Phænogams, &c. for Monocotyledones, Dicotyledones, Exogenæ, Endogenæ, Cryptogamæ, Phænogamæ, &c. It is even carried further by the use of Rosaceous plants instead of Rosaceæ, Orchidaceous or Orchideous plants for Orchidaceæ or Orchideæ. But these amended names are still too long, and too un-English in sound to be in favour with the world which lies without the narrow circle of systematic Botanists; and no valid reason seems to exist for not immediately reforming that part of the nomenclature of Botany. The attempt has been already made in the author's School Botany, where it will be found that by availing himself of well-known English names, or of the English word "wort," or by merely remodelling the terminations, a uniform English nomenclature has been secured for all the common European natural orders of plants. Thus for Nymphæaceæ, Ranunculaceæ, Tamaricaceæ, Zygophyllaceæ, Elatinaceæ, are substituted Water-lilies, Crowfoots, Tamarisks, Bean-Capers, and Water-peppers; for Malvaceæ, Aurantiaceæ, Gentianaceæ, Primulaceæ, Urticaceæ, Euphorbiaceæ, are employed Mallow-worts, Citron-worts, Gentian-worts, Prim-worts, Nettle-worts, Spurge-worts; and the terms Orchids, Hippurids, Amaryllids, Irids, Typhads, Arads, Cucurbits, are taken as English equivalents for Orchidaceæ, Halorageæ, Amaryllidaceæ, Iridaceæ, Typhaceæ, Araceæ, and Cucurbitaceæ.

The principles kept in view in effecting those changes, have been also observed throughout the present work, so that standard English names for classes, subclasses, and orders are now no longer wanting. The author confidently believes that

every intelligent reader will admit that such names as Urn-mosses, Taccads, False Hemps, Pepper-worts, Bristle-worts, Chenopods, Hydrocharads, Scale-mosses, Birth-worts, and Fringe-myrtles are preferable to Bry-a-ce-æ, Tac-ca-ce-æ, Da-tis-ca-ce-æ, E-la-ti-na-ce-æ, Che-no-po-di-a-ce æ, Desvaux-i-a-ce-æ, Hy-dro-cha-ri-da-ce-æ, Jun-ger-man-ni-a-ce-æ, A-ris-to-lo-chi-a-ce-æ, Cha-mæ-lau-ci-a-ce-æ, and other sesquipedalian words.—*Lindley's Vegetable Kingdom, unpublished.*

58. DWARFED PLANTS.

There is the following interesting account (somewhat abridged) of these singular productions by Professor Morren, in the 3rd number of the Ghent Annals, p. 109.

"Nowhere has the mania for dwarfing plants been carried further than in Japan. Thunberg, in his flora of that country, had spoken of an apricot-tree, which he called Amygdalus nana, although the tree, which he thought to be very like our common apricot, was from fifteen to twenty feet high. Messrs. Siebold and Zuccarini have determined Thunberg's plant to be the Mume Plum, (Prunus Mume) which the Chinese call Bai. This tree is really a marvel in the history of dwarfed plants, and is thus spoken of by Dr. Siebold.

The Mume is common in Japan, and thrives in the most northern part of the country, where it grows fifteen or twenty feet high, and is very like an apricot-tree It is, however, in its wild state, or when made into hedges, only a thick bush, very much branched, and eight or twelve feet high. It is commonly cultivated for its beautiful flowers, as well as for its fruit.

The Mume is much spoken of in the Chinese and Japanese legends of their saints, and in the history of great men and celebrated poets; it is even looked upon as something holy.

Pilgrims are shewn ancient trunks of this tree, under which deified princes have rested, and celebrated priests or inspired poets composed their psalms and sublime canticles. For this reason young plants struck from cuttings of such holy trees have a great value throughout the empire of Japan.

The fruit ripens in June. When ripe it is insipid, and therefore it is salted in a green state like cucumbers, and then is eaten, as a vegetable, with rice and fish. Europeans,

however, do not admire the sharp and bitter taste. When salted the plums are often mixed with the leaves of Ocymum crispum, which gives them a red tint. The juice of the green fruit is used as a refreshing drink in fevers, and is also indispensable in preparing a beautiful light pink colour with Carthamus or Safflower.

In good seasons the tree is in full flower in February, when the altars of idols, and dwelling-houses are every where decorated with its branches, which the Japanese regard as a symbol of the return of spring. The blossom of the wild plant is white, but there are cultivated varieties, with various shades of colour between white and red, and some are even green or slightly yellow. Double varieties are in most request, and dwarfed trees of that description are planted every where near dwellings and round the temples. The largest collection of these varieties, said to amount to several hundreds, is in the possession of the Prince of Tsikusen, to whose kindness we are indebted for drawings of some of the rarest kinds. The passion of the Japanese for dwarfed trees is inconceivable, and it is principally on that account that the cultivation of the Mume is one of the most common and profitable occupations of the country. They graft it by approach, and in this way obtain trees whose branches hang to the ground like those of a weeping willow. A dealer offered us in 1836 a bush in full flower, and scarcely three inches high. This prodigy of gardening was growing in a little varnished box with three steps, like the boxes of medicine which the Japanese carry at their girdle. In the upper step was the Mume, the next step was occupied by a Fir tree of similar smallness, and on the lower step was a Bamboo not above an inch and half high.—*Flora Japonica, pp.* 29, 31.

These details, adds Dr. Morren, were confirmed to me by Dr. v. Siebold himself, when he was at Ghent in 1844; he did not however confirm all the tales that are current as to the manner by which the Japanese succeed in dwarfing everything. It is said that they select the very smallest seeds, taken from the very smallest plants, two circumstances which are certainly quite rational and conformable to all the facts known to us in connection with varieties of race. No doubt indeed exists about the operation thus far; but the following assertions are much more apocryphal. It is said, that as soon as the plants have germinated, the Japanese

cover them with fluid honey, or with dissolved sugar; that they afterwards paint them with a camel's hair pencil, using the same material, and that they afterwards introduce into the little box, which serves as a greenhouse for these marvellous pygmies, a nest of little ants, whose eggs soon hatch and produce an active colony greedy of sugar, and incessantly running over the plants, which, although alive, have really been converted into a cold preserve. Gardeners know very well that aphides, scale-insects, the cocci and other vegetable leprosies do in fact torture and distort plants till they are quite disfigured. The everlasting play of these insects, which are always running over every part of the plant, keeps up a peculiar excitement which ends in producing the state of dwarfness in question. At least that is what the Japanese say.

The Fir of which Dr. Siebold spoke, in the paragraph above quoted, as being only three inches high, and growing on the second stage of the box, was the Pinus Massoniana, the *Wo matza* of the Japanese, or the *Kok sjo* of the Chinese. Thunberg mistook it for the Scotch Fir. Its history is very curious, and is also given in the Flora Japonica (p. 25, vol. 2.).

Of all the Conifers we generally found this the commonest through the whole empire of Japan. In places where it does not grow wild, it has been universally cultivated. It has a great reputation on account of the fables, miraculous stories, and idle tales of all sorts, mixed up with its history, and is a religious symbol in the ceremonies and festivals of the people. A true Japanese cannot possibly dispense with it, and takes care to have it wherever he lives. A Wo Matza and a Mume are planted before the residence of Mikado. It forms groves round the temple of the Sun-god, of saints, and of holy men; and it overshadows all the little chapels and gardens adjoining the dwelling-houses, &c. &c. ——On the high road it forms alleys a hundred leagues long; and the course of every highway is marked by hillocks planted with this Pine and species of Nettle trees.

The art of the Japanese gardener is exhausted in the cultivation of these Pines. They are clipped and cut into all sorts of shapes; their branches are spread into fans, or horizontal trellisses, and are thus fashioned into a sort of flat dish. In this kind of gardening extremes are made to touch,

and the traveller is astonished to find specimens of an immense size placed by the side of others of the most tiny dimensions. While staying at Ohosaka I went to see the celebrated Pine tree before the Naviwaja Tea-house, the branches of which are artificially spread out into a circumference of 136 feet. On the other hand, they showed me at Jeddo a dwarf tree in a lacquered box, with branches not occupying more than two square inches. They even know how to graft Conifers in Japan; and we saw dwarfed specimens on which almost every variety of Pines known in Japan was fixed by grafting."

59. EPIDENDRUM Lindenii.

E. (Amphiglottium) *Lindenii*; caulibus simplicibus strictis, foliis ovalibus obtusis emarginatisve coriaceis distichis, racemo oblongo obtuso, sepalis petalisque æqualibus, labelli tripartiti laciniis lateralibus subrotundis laceris intermediâ cuneatâ emarginatâ dentatâ suprà carinatâ basi bituberculatâ cristâ crassâ subrotundâ plicatâ ante tuberculos, clinandrio denticulato.

This beautiful species was discovered on rocks near Merida by Mr. Linden, a most diligent and successful collector, to whom our gardens owe many of their fairest ornaments. It forms no. 636 of his herbarium, the whole of the Orchids in which have been liberally placed in our hands for publication. From the ticket attached to the dried specimens, we learn that the plant appears in the form of three well-marked varieties; in one the flowers are a bright carmine, in another rose-coloured, and in a third of a yellowish orange. It was met with in August, 1842, at the height of 5000 feet. Our living specimens have been communicated by Messrs. Loddiges, (603), and appear to belong to none of Mr. Linden's varieties, for the whole centre is rose-coloured, while the upper half of the sepals and petals is a dull but very pleasing salmon colour. The habit of the plant is quite that of E. elongatum; it is however nearer E. Schomburgkii, the middle lobe of its lip having the deep keel of that species. From all the described plants thus allied to E. Schomburgkii, E. Lindenii differs in having a large plaited or ribbed semicircular crest, placed in front of the tubercles so frequently present at the base of the lip of this genus.

60. The Genus ODONTOGLOSSUM.

In pursuance of the plan adopted in this work on several previous occasions, we now proceed to give an account of the species of another of those large genera of Orchids, which fill our collections with their species, and whose names are to be found scattered through so many books that even the most skilful Botanist scarcely knows where to search for them, or when his inquiry is exhausted.

The genus Odontoglossum presents itself under three principal general forms. In the one the anther-bed is surrounded by a deep fringe, or membranous border; the two others are without that fringe. The first constitutes the subgenus (?) Trymenium; the second and third are Odontoglossum proper. Of the second the lip is always white, and generally broad and flat. Of the third the lip is generally yellow, never white, and most commonly narrow. There is no tendency at present observed on the part of Trymenium to pass into Odontoglossum, and it might be regarded as a genus; the two sections of Odontoglossum evidently touch by O. constrictum and hastatum among the "white lips," and O. læve, or such species, among the "stained lips."

Sect. I. Trymenium, *Lindl. in Bot. Reg.* 1843. *t.* 3.

1. O. *brevifolium* (Lindl. in Benth. Plant. Hartweg. p. 152); foliis ovato-oblongis oblongisque patentibus scapo simplici apice multifloro racemoso duplo brevioribus, bracteis oblongis membranaceis pedicellorum longitudine, sepalis subrotundis unguiculatis undulatis, petalis paullo minoribus, labello unguiculato basi columnæ adnato auriculato cuneato emarginato sepalis breviore basi tuberculis verrucosis 5 et appendice parva antica 3-dentata aucto, clinandrio cucullato serrato in marginem membranaceum alæformem decurrens.——*Loxa.*——Pseudobulbs ovate oblong compressed, one-leaved. Leaves two inches broad, and sometimes not much longer. Flowers an inch and a half or more in diameter; eleven or twelve in a drooping raceme, apparently purple.
2. O. *citrosmum* (Lindl. Bot. Reg. 1842. misc. 68; 1843. t. 3); pseudobulbis subrotundis compressis lævibus monophyllis, folio oblongo-ligulato obtuso racemo paulò breviore, se-

palis oblongis obtusis petalisque conformibus subæqualibus, labello unguiculato reniformi basi bituberculato, columnæ alis lateralibus subtruncatis dorsaliq. rotundato denticulatis.——*Mexico*.——Flowers very large, white, stained with pink, and a violet-coloured lip.

3. O. *pulchellum* (Bateman in Bot. Reg. 1841. t. 48); pseudobulbis oblongis compressis ancipitibus diphyllis, foliis linearibus (vix semuncialibus pedalibus) apice obliquè emarginatis, scapo foliis æquali ancipiti debili apice racemifero 6-7-floro, sepalis ovatis acutis, petalis obovatis acutis subundulatis, labelli trilobi laciniis lateralibus triangularibus intermediâ oblongâ subquadratâ apice recurvâ: callo baseos carnoso antrorsum hippocrepico retrorsùm trilobo, columnæ alis et clinandrio laceris.——*Guatemala*.——The more striking features in this species are the long thin pseudobulbs, the very narrow grassy leaves, and a single protuberance at the base of the white lip. This protuberance is deep yellow spotted with crimson, very fleshy, firm and shining, and is almost horseshoe-shaped in front, while it is distinctly three-lobed behind, in consequence of two deep depressions.
4. O. *Egertoni*; facie O. pulchelli sed floribus duplò minoribus, labello acuto basi excavato dentibus duobus supra excavationem inflexis posticè rotundato cordato.——*Guatemala ?*——This is known in gardens as a variety of O. pulchellum, than which it is smaller in all its parts, and from which it differs in the lip being quite acute, not almost truncate, with an excavation at its base in lieu of the triple fleshy tubercle of O. pulchellum. Flowers pure white.
5. O. *crispum* (Lindl. in Ann. Nat. Hist. 15. 256); foliis lanceolatis scapo multifloro paniculato (nunc brevi racemoso) brevioribus, sepalis ovato-lanceolatis, petalis ovatis acutissimis crispis membranaceis, labello subconformi dentibus duobus validis in fronte paucisque minoribus utrinque versus laminæ basin, clinandrii alis lateralibus rotundatis laceris posticâ nullâ.——*Bogota*.——A most beautiful species, occasionally as much as three feet high and more. Flowers large, yellow, with a purple centre.
6. O. *roseum* (Lindl. in Benth. Pl. Hartweg. p. 151); foliis oblongo-lanceolatis racemo gracili duplo brevioribus, bracteis ovatis concavis subangulatis pedicellis duplo bre-

vioribus, sepalis petalisque lanceolatis, labello trilobo basi bilamellato : lobis lateralibus nanis rotundatis intermedio obcuneato acuto, columna elongata apice alis 3 membranaceis integris aucta.——*Peru.*——Leaves from three to five inches long. Raceme about a span long. Flowers bright rose colour, something less than an inch in diameter.

Sect. II. Eu-Odontoglossum.

* Leucochilum.—White Lip.

7. O. *Cervantesii* (Llave Orch. Mex. 2. 34. Gen. & Sp. Orch. no. 4. Bot. Reg. 1845. t. 36); pseudobulbis ovatis angulatis, foliis solitariis oblongis in petiolum canaliculatum angustatis, scapo paucifloro, bracteis vaginisque membranaceis acutissimis equitantibus elongatis, sepalis membranaceis oblongo-lanceolatis acutis, petalis latioribus subunguiculatis acutis, labello subcordato-ovato acuto unguiculato, ungue carnoso cyathiformi pubescente anticè bidentato medio tuberculato, processubus 2 pilosis ante cyathum, columnæ pubescentis auriculis rotundatis. ——*Oaxaca.*——Flowers very pale pink, large, delicate, very sweet-scented, with numerous broken crimson concentrical bands.
8. O. *apterum* (Llave Orch. Mex. 2. 35. Gen. & Sp. Orch. no. 5); "bulbis ovatis depressis; foliis lato-lanceolatis nervosis conduplicatis; scapo tereti paucifloro; gynostemio aptero crasso."——*Mexico.*——This is said to be found in the same place as the last, and to be extremely like it, differing however in the lip being crenated.
9. O. *cœrulescens* (Ach. Richard in Ann. Sc. 1845. Jan.); "pseudobulbis ovoideo-oblongis compressis 1-phyllis, fol. oblongo lanceolato acutissimo; scapo 1-2-floro; floribus albido-cœrulescentibus; labello cordato, membranaceo, acuto, margine sinuoso, eroso; gynostemio clavato, pubente."——*Mexico.*
10. O. *membranaceum* (Lindl. Sertum Orchid. t. 25); pseudobulbis foliisque O. Cervantesii, scapo 2-4-floro, bracteis vaginisque membranaceis acutissimis equitantibus, sepalis membranaceis unguiculatis lanceolatis, petalis latioribus oblongis obtusis, labello cordato obtusissimo unguiculato, ungue carnoso cyathiformi pubescente antice bidentato medio tuberculato, processubus 2 ante cyathum

elongatis pubescentibus, columnæ pubescentis auriculis rotundatis.——*Oaxaca.*——Very like O. Cervantesii, but with a deeply cordate very blunt lip and blunt petals.

11. O. *Galeottianum* (Ach. Richard in Ann. Sc. 1845. Jan.); "pseudobulbis aggregatis 1-phyllis, fol. elliptico lanceolato acuto; scapo foliis duplo longiore 3-floro; flor. albis magnis; labelli alis erectis obtusis truncatis, lamina subcordato-acuminata; gynostemio margine alato, alis angustis longis."——*Mexico.*——

12. O. *nebulosum* (Lindl. Sertum Orchid. t. 25); pseudobulbis diphyllis, foliis oblongis erectis pedunculo terminali erecto sub-4-floro brevioribus, bracteis membranaceis scariosis ovario dimidio brevioribus, sepalis membranaceis oblongis undulatis apiculatis, petalis conformibus latioribus basi angustatis, labello sessili basi cucullato carnoso limbo ovato acuto dentato: lamellis maximis rotundatis anterioribus obtusis, columnâ apterâ pubescente. ——*Mexico.*——A much larger plant than O. Cervantesii, with wavy sepals and petals, and a coarsely toothed lip. Can it be the O. apterum of Llave? I should have thought so if he had not called that plant "O. Cervantesii simillimum," an expression which does not at all apply to this species.

13. O. *Rossii* (Lindl. Sert. Orch. sub t. 25. Bot. Reg. 1839. t. 48.—*O. Ehrenbergii*, Link, Klotzsch, & Otto, ic. p. 38. t. 16.—*O. acuminatum*, Hort.); pseudobulbis ovatis cæspitosis ancipitibus monophyllis, foliis oblongo-lanceolatis scapo radicali subbifloro longioribus, bracteis membranaceis carinatis acuminatis, sepalis lineari-lanceolatis carinatis acuminatis patentibus, petalis oblongis obtusis revolutis, labello subrotundo-ovato emarginato undulato lamellis unguis confluentibus rotundatis denticulis 2 anterioribus obtusis, columnâ apterâ pubescente. ——*Mexico.*—— A small species, with one or two flowers only on the scape. The sepals are yellowish green, blotched with brown; the petals are white, spotted with purple at the base. The lip is pure white, and slightly downy. A variety has narrower and darker coloured sepals, smaller flowers, and the callus at the base of the lip white, not yellow. This seems almost intermediate between O. Rossii and O. stellatum; especially as the lip is rather more ovate than in the former species.

14. O. *stellatum* (Lindl. in Bot. Reg. 1841. misc. 25); pseudobulbo ovali compresso, folio solitario lanceolato recurvo, scapo subbifloro, bracteis ovarii triquetri medium haud attingentibus, sepalis petalisque æqualibus linearibus acuminatis herbaceis, labello rhomboideo grossè dentato appendice baseos truncato quadridentato libero.——*Mexico.*——A plant of nearly the same size and habit as *O. Rossii*, from which it differs in the sepals and petals being equally herbaceous and narrow, of a dull olive green, faintly spotted or rather clouded with purple. It has a pure white lip.
15. O. *pygmæum* (Lindl. in Benth. Pl. Hartw. p. 82); pseudobulbis ovalibus vaginis membranaceis acuminatis vestitis, foliis angustè ovalibus in petiolum angustatis racemo paucifloro flexuoso duplò longioribus, sepalis petalisque subæqualibus, labelli pubescentis rhombei dentati appendice maximâ bivalvi in medio tumidâ: laciniis rotundatis.——*Mexico.*——This curious little alpine plant forms tufts of pseudobulbs and membranous sheaths, from among which just peep out the tiny colourless flowers, which are not above 3 lines in diameter even if spread out.
16. O. *constrictum* (Lindl. in Bot. Reg. 1843. misc. 25); paniculâ laxâ basi foliosâ, sepalis petalisque expansis lineari-lanceolatis acuminatis, labello medio constricto: hypochilio oblongo, epichilio subpandurato cuspidato serrato basi lamellis 2 serratis aucto, columnâ bicirrhosâ. ——*La Guayra.*——This has the habit of Oncidium sphacelatum or some such plant. The flowers are yellow spotted with brown, except the lip which is white stained with violet.
17. O. *hastatum* (Bateman Orch. mex. guat. t. 20); pseudobulbis oblongis ancipitibus diphyllis, foliis ligulatis basi conduplicatis, racemo elongato paniculato, sepalis petalisque conformibus herbaceis lanceolatis acuminatis, labelli hastati lobis lateralibus truncatis intermedio ovato acuminato, cristæ lamellis 4 parallelis, columnæ auriculis lunatis.——*Mexico.*——A plant with the habit of Oncidium leucochilum. The flowers are greenish with red blotches, except the lip which is white with a purple stain at the base.

* * Xanthochilum.—Stained lip.

a. Columnæ auriculis rotundatis latioribus quam longis vel nullis.

* ** In this arrangement the species with a 3 lobed lip come first, and then those which have an entire lip are stationed in the following order, viz. first, such as have obtuse sepals and petals, then such as have them acute, and last come the species with very much acuminated sepals and petals.

18. O. *grande* (Lindl. in Bot. Reg. 1840. misc. no. 97. Bateman Orch. Mex. Guat. t. 46); sepalis lanceolatis lateralibus convexis falcatis petalisque oblongis obtusiusculis latioribus subundulatis, labello subrotundo basi auriculato sepalis plus duplò breviore: tuberculis basi tribus corrugatis aliisque lateralibus dentiformibus minoribus, columnæ tomentosæ marginibus rotundatis convexis incurvis. —— *Guatemala.* —— This is a very extraordinary plant. Its habit is that of Odontoglossum, with which its unguiculate lip and peculiar column also correspond; but the tubercles at the base of the lip are those of Oncidium. The dried flowers measure six inches and a half from the tip of the petals, and the fresh ones are even larger. They are yellow, almost covered with cinnamon-brown bands and blotches. Two to five flowers grow together on a scape, which is seldom more than five or six inches long.
19. O. *Warneri;* pseudobulbis ovatis ancipitibus subangulatis apice elongatis diphyllis, foliis patulis lineari-lanceolatis racemo paucifloro brevioribus, bracteis minimis, sepalis ovalibus patentissimis, petalis paulo angustioribus obtusis ascendentibus, labelli trilobi plani laciniâ intermediâ cuneatâ bilobâ lateralibus quadratis, tuberculo disci simplici, columnâ elongatâ apterâ.——This little plant would be a very good Oncidium if it had any wings to the column; it however approaches more nearly some of the Columbian species of Odontoglossum, with which it will naturally associate. Its raceme is about a foot high, and bears seven or eight distant flowers of a rich yellow, streaked with dull crimson along the middle of the sepals and petals. The pseudobulbs, which are nearly two inches long, are a pale sea-green colour.

It was exhibited at the meeting of May 24, in the Garden of the Horticultural Society, by C. B. Warner, Esq., a zealous collector of such plants, whose name it will henceforward bear.

20. O. *gracile* (Lindl. in Benth. pl. Hartw. p. 151); foliis oblongis papyraceis basi canaliculatis angustatis scapo gracili subpaniculato brevioribus, bracteis minutis, sepalis petalisque oblongis obtusis longe unguiculatis illis dorso carinatis, labello bilamellato oblongo obtuso medio geniculato, columnæ alis falcatis acutis.——*Peru.*——Flowers small, dull brown.

21. O. *longifolium* (Lindl. in Benth. pl. Hartw. p. 152); foliis lanceolatis papyraceis basi longe canaliculatis scapo subpaniculato gracili brevioribus, bracteis minutis, sepalis petalisque lanceolatis acutis longe unguiculatis, labello bilamellato oblongo acuto medio geniculato apicibus lamellarum auriformibus divergentibus, columnæ alis falcatis minimis.——*Peru.*——This and the preceding have much the habit of the Encyclian Epidendrons.

22. O. *ixioides* (*Cyrtochilum ixioides*, Lindl. Gen. & Sp. Orch. p. 211); cæspitosum, ferè ebulbe, foliis lineari-lanceolatis acutis striatis, scapo simplici apice racemoso, bracteis brevibus ovatis cucullatis, sepalis petalisque unguiculatis obtusiusculis, labello oblongo obtuso basi bilamellato medio 5-tuberculato, columnâ apterâ.——*New Grenada.*——Scape $1\frac{1}{2}$ foot high; flowers small, apparently yellow.

23. O. *lævc* (Lindl. in Bot. Reg. 1844. t. 39); pseudobulbis compressis sulcatis, foliis oblongo-ensiformibus obtusis apice obliquis, floribus paniculatis, bracteis laxis membranaceis, sepalis petalisque oblongo-linearibus acutis planis, labelli laminâ panduriformi apiculatâ ungue lævi obsoletissimè bidentato, columnæ alis apice rotundatis crispis basi planis.—— *Guatemala.*—— The fragrant flowers have cinnamon-brown blotches on the yellow ground of the petals and sepals; and the lip, which is white, is banded with violet across the middle.

24. O. *retusum* (Lindl. in Benth. pl. Hartw. p. 152); foliis lineari-lanceolatis papyraceis scapo paniculato breviori-bus, bracteis ovatis, sepalis petalisque subsessilibus lanceolatis acutis supremo canaliculato, labello oblongo retuso basi bilamellato, columnæ nanæ alis maximis oblongis. ——*Peru.*——Flowers small, apparently deep yellow.

25. O. *Bictoniense* (Lindl. in Bot. Reg. 1840. t. 66. Sertum Orchidaceum sub. t. 25.— *Cyrtochilum Bictoniense*, Bateman, Orch. Mexic. & Guatemala, t. 6.—*Zygopetalum africanum*, Hooker in Bot. Mag. t. 3812); pseudobulbis oblongis compressis 2-3-phyllis, foliis ensiformibus undulatis patentibus scapo racemoso duplò brevioribus, bracteis herbaceis lanceolatis acuminatis ovario duplò brevioribus, sepalis petalisque subæqualibus lineari-lanceolatis maculatis, labelli ungue bilamellato laminâ cordatâ acuminatâ undulatâ, columnæ alis integris——*Guatemala*.——A fine stately species with very upright racemes of flowers, whose sepals and petals are green spotted with brown, and the lip either lilac or nearly white.
26. O. *myanthum* (Lindl. in Benth. pl. Hartweg. p. 152); foliis lanceolatis basi canaliculatis erectis scapo paniculato elongato flexuoso duplo brevioribus, bracteis minutis, sepalis petalisque lineari-lanceolatis unguiculatis acutis, labello geniculato lanceolato acuto basi bilineato, columnæ brevis alis obsoletis subulatis.——*Peru*.——Leaves a foot and half long; the scape twice as long; the panicle narrow and very much branched; the flowers very small for this genus.
27. O. *lacerum* (Lindl. in Sert. Orchid. t. 25); pseudobulbis ovalibus ancipitibus, foliis lineari-oblongis in petiolum canaliculatum angustatis, racemo subpaniculato terminali, bracteis ovatis acutis squamæformibus, sepalis petalisque rhombeo-lanceolatis acuminatis, labello lacero ovato concavo apice cuspidato lamellis fimbriatis : denticulis 2 anterioribus subulatis glabris, columnâ glabrâ auriculis subtruncatis.——*Peru*.——Flowers large, bright lemon colour, with a brown blotch or two in the middle of the sepals and petals, and another at the upper half of the lip.
28. O. *pardinum* (Lindl. in Sert. Orch. sub t. 25.—*Cyrtochilum pardinum*, L. p. 210); foliis lineari-oblongis basi angustatis striatis, petalis undulatis sepalisque angustioribus lanceolatis, labello unguiculato ovato-lancelato: unguis axi cum columna connato utrinque lamellato; callis quibusdam elevatis inæqualibus linearibus productioribus e medio.——*Peru* and *Popayan*.——Flowers large yellow, spotted with brown.
29. O. *epidendroides* (Humb. et Kunth. N. G. et Sp. Pl. 1.

351. t. 85. Lindl. G. & Sp. Orch. no. 1); pseudobulbis ovato-oblongis compressis, foliis lanceolatis subcoriaceis, scapo erecto multifloro, sepalis petalisque acuminatis undulatis, labello unguiculato oblongo obtuso undulato-crenato, basis trituberculato.——*New Grenada.*——Flowers large, yellow, scentless, with broad brown blotches. Only known from the figure above quoted.

30. O. *angustatum* (Lindl. in Bot. Reg. sub t. 1992); pseudobulbis compressis, foliis longis lato-lanceolatis erectis scapo brevioribus, scapo paniculato, sepalis linear-lanceolatis acuminatis, petalis ovato-lanceolatis unguiculatis undulatis, labello ovato-lanceolato acuminato: cristâ baseos lamellatâ multifidâ, columnâ muticâ.——*Peru.*——This is a very fine plant, with spotted flowers resembling those of O. Hallii and angustatum, and as much as three inches from tip to tip of the sepals.

31. O. *revolutum* (Lindl. in Ann. Nat. Hist. 15. 256); foliis ensiformibus rigidis margine revolutis scapo rigido apice paniculato brevioribus, bracteis laxis acutis cucullatis, panicula subcorymbosa densa, sepalis petalisque lanceolatis unguiculatis acutis, labello conformi sessili cordato lamellis 5 carnosis integris quarum tres superiores multo breviores: lateralibus subulatis, columna aptera.——*Popayan*——Scape above two feet long, terminated by a stiff corymbose erect panicle of flowers. The leaves are stiff and straight, rolled back at the edge, and when dry very much puckered, as if they had been fleshy. Mr. Hartweg found it on the Paramo de Guanacas, at the height of 11,000 feet above the sea.

32. O. *maculatum* (Llave Orch. Mex. 2. 35. Bot. Reg. 1840. t. 30); pseudobulbis oblongis compressis monophyllis, foliis oblongis nervosis acutiusculis racemis pendulis multifloris brevioribus, bracteis navicularibus herbaceis ovario brevioribus, sepalis lineari-lanceolatis acuminatis discoloribus, petalis oblongis undulatis acuminatis, labello cordato acuminato subcrenato: appendice unguis bivalvi concavâ cochleari apice productâ emarginatâ per medium argutè serrulatâ, columnâ pubescente subapterâ. ——*Mexico.*——Sepals chesnut brown. Petals and lip clear yellow, spotted with brown.

33. O. *cordatum* (Lindl. in Bot. Reg. 1838. misc. 90. Knowles & Westcott, Floral Cabinet, t. 100); pseudobulbis ob-

longis compressis diphyllis, foliis lato-oblongis planis acutis scapo squamis carinatis vaginato brevioribus, racemo stricto disticho, bracteis navicularibus acuminatis membranaceis, sepalis petalisque lineari-lanceolatis acuminatissimis, labello cordato acuminatissimo integerrimo appendice baseos carnosa apice biloba basi utrinque dente unico auctâ, columnâ pubescente clavatâ subapterâ.——*Mexico.*——Sepals and petals richly blotched with brown upon a yellowish green ground. Lip white, with the crest at the base purplish, and the apex spotted and blotched with rich brown.

b. Columnæ auriculis linearibus, longioribus quam latis, v. cirrhosis.

34. O. *cristatum* (Lindl. in Benth. Pl. Hartweg. p. 152); foliis lineari-lanceolatis acutissimis scapo multifloro simplici paullo brevioribus, sepalis petalisque lanceolatis acuminatis, labello lanceolato acuminato geniculato basi lamina multifida cristato, columna elongata basi membranaceo-marginata apice alis duabus uncinatis, anthera cristata.——*Peru.*——Flowers spotted with brown, about as large as those of O. cordatum. Leaves very narrow.

35. O. *cirrhosum* (Lindl. in Hooker. Bot. Misc. Gen. & Sp. Orch. no. 2); sepalis lanceolatis petalisque latioribus undulatis acuminatissimis maculatis labello longioribus, labelli laminâ cordatâ acuminatissimâ, columnâ apice apterâ bicirrhosâ.——*Guayaquil.*——Nothing more is known of this remarkable plant than could be gathered from the examination of a few dried flowers. They appear to be yellow, with some broad purplish blotches.

36. O. *Hallii* (Lindl. in Bot. Reg. sub t. 1992); pseudobulbis ovatis acuminatis ancipitibus, foliis ensiformibus in basin angustatis, scapo paniculato, sepalis petalisque ovato-lanceolatis acuminatis unguiculatis, labello oblongo acuminato pectinato; cristâ baseos lamellatâ multifidâ, columnæ alis bidentatis dente superiore aristato.——*Peru.*——A most beautiful species. Flowers blotched with brown upon a yellow ground, three inches and a half in diameter. Mr. Hartweg brought it from the western declivity of Pichincha.

37. O. *rigidum* (Lindl. in Benth. Pl. Hartweg, p. 152); foliis oblongis basi angustatis scapo rigido paniculato breviori-

bus, sepalis lateralibus lineari-lanceolatis dorsali petalisque lanceolatis, labello unguiculato obovato cordato apiculato lineis duabus elevatis in unguem, columnæ brevis semiteretis alis angustis decurvis serrulatis.——*Peru.*——A terrestrial plant. Flowers yellow, whole-coloured, with a very long narrow stalk to the lip.

38. O. *bicolor* (Lindl. in Benth. Pl. Hartweg, Jan. 1845. ined.); foliis lanceolatis scapo simplici paucifloro flexuoso subæqualibus, sepalis petalisque ovatis acutis subundulatis æqualibus, labello unguiculato obovato apiculato basi obtuso, denticulis quibusdam (sex) in unguem, columnæ brevis alis decurvis serratis.——*Peru.*——Only known from a drawing by Mathews, in Sir Wm. Hooker's Herbarium. The flowers are large, bright violet, with a great whole-coloured yellow lip.

* * Species concerning which there is no sufficient information.

39. O. *erosum* (Ach. Richard in Ann. Sc. Jan. 1845); "pseudobulbo ovoideo oblongo 1-phyllo; fol. lanceolatis acutis; scapo 1-floro; sepalis luteis: labello lilacino late ovali margine eroso-denticulato."——*Mexico.*——

40. O. *Ghiesbreghtianum* (Ach. Richard in Ann. Sc. Jan. 1845); "pseudobulbis ovoideis compressis 3-phyllis; scapo pedali 3-6-floro; flor. luteis brunneo-maculatis: labello luteo, longe unguiculato, transverse orbiculari, emarginato, sepalis duplo longiori, ungue lineari basi hinc et illinc obtuse auriculato, superne bi-cristato."——*Mexico.*——

61. CLEISOSTOMA discolor.

C. *discolor*; foliis oblongis canaliculatis obliquè truncatis, racemo paniculato, labello trifido utrinque plicato lobo medio carnoso obtuso, intus bituberculato dente dorsali indiviso carinato, calcare oblongo obtuso.

A little inconspicuous plant obtained from India by Messrs. Loddiges. The flowering stem is long, slender, dull purple, and branched at the extremity. The sepals and petals are dull yellow, with a green tinge, the spur is nearly white.

62. BRASSIA pumila.

B. *pumila*; foliis binis patulis elongato-lanceolatis canaliculatis, sepalis lineari-lanceolatis acuminatis inferioribus labello longioribus, labello pandurato acuminato subundulato basi bicarinato dentibus ante carinas 2 acutis elevatis aucto.

This Brassia is remarkable for its dwarfness, as we learn from Mr. Barker who has flowered it from Mr. Linden's collections. It has pale yellow flowers stained with dull purple at the base of the petals; but there is no purple on the sepals, and the lip is very slightly tinted. It seems to be peculiar in the large size of the pair of somewhat transparent teeth which stand up in front of the two little customary ridges at the base of the lip; but it may be a variety of Br. Lanceana. Its aspect is, however, widely different.

63. SALVIA pratensis.

"Why is this species not cultivated here as a meadow plant? It forms a large portion of the hay in the north of Italy, in the Ionian islands, and in parts of Switzerland; and, by the admixture of its deep blue flowers, with the red, yellow, and white, that prevail in our meadows, it adds much to their beauty, and affects the general aspect of the scenery. What are the peculiarities of soil and situation in which it delights, and are there any, which would prevent its being found useful here? I regret not having taken these points into consideration, while I was in the quarter where it flourished, and where it ceased to be frequently seen. From recollection I believe that the presence or vicinity of calcareous matter is the needful thing. It is indeed a subject deserving investigation, whether or not the neighbourhood of calcareous rocks, or their existence at a great depth below the surface, influences the vegetation, by affecting the springs, by electricity, or some other mysterious agency, where the presence of an extraordinary quantity of calcareous matter is not manifest in the soil. Climate does not materially interfere with the growth of Salvia pratensis, for it rises from the plain of Lombardy into the valleys of the Alps, and is found amongst the stones on the mountains behind Trieste, as well as in the alluvial meadows by the salt pans, and very high amongst the rocks in Corfu and Santa Maura. It is superabundant

on the banks of the Brenda near Padua, but that river after rains comes down absolutely white in its turbid state. It is very abundant in the meadows of the beautiful valley of the Ticino, under the calcareous rocks. On the northern side of the St. Gothard it paints the valley of the Reuss; becoming less abundant on approaching the lake of Lucerne, and beyond Lucerne it disappears. A very little below Lucerne a considerable river, of which I forget the name, falls in from the left; and after heavy rains, while the Reuss flows on clear and blue, the turbid yellow water of the subsidiary river continues below the junction unmixed, and occupying perhaps a third or a quarter of the whole breadth. The Salvia has disappeared, as well as a blue Phyteuma, which had been seen above the lake of Lucerne, and a dirty white Phyteuma has started up abundantly by the hedge sides. Traversing the rich country, through which the yellow river runs, we see no Salvia pratensis; but within ten miles of Berne here and there a plant reappears, and nearer to Berne, as we approach the Aar, it becomes more abundant; and, following the course of that river up to Thun, we find it again painting the meadows. The Aar, like the Reuss and Ticino, is a clear river from the calcareous Alps. From these observations, I conceive that this beautiful plant would thrive, where there is a sufficiency of calcareous matter, in the meadows of this country."—*W. Herbert.*

64. ORCHIS sambucina.

"The only marked distinction between the beautiful yellow and white Orchis sambucina of the Alps and Orchis provincialis is, that the latter has the tubers undivided, and the former belongs to the division which has palmate tubers, sambucina having short prominences at its base. In colour, fragrance, and the habit of growing on parts of high mountains where the soil is blackish and where the clouds frequently rest, they agree perfectly. Having cultivated Orchis fusca in a large pot of strong alluvial soil, mixed with a little pulverized chalk, (the pot being plunged in sand, and the tubers set about three inches and a half under the surface), I examined the state of the new tubers this morning, as the leaves had died entirely away. The new tubers of those which had survived the winter frosts were large, and of the

purest healthy white; and although the plant belongs to the section with undivided tubers, and those last year were undivided, the largest of the new tubers had two strong lobes at the base. This circumstance, arising in the very season of cultivation, shews how Orchis provincialis may in a different locality acquire the prominences which have been supposed to distinguish sambucina from it. The plants called Sambucina, as far as I have seen, are more vigorous and grow in colder quarters. The fine crimson Orchis with an orange throat, called O. Schleicheri by Sweet, grows in company with the yellow on the southern brow of the Alps, and differs in being scentless, and a little also in the length of the spur; but, although it is difficult to understand why those peculiarities should attend the change of colour, from the manner in which they grow intermixed and in contact with each other, with foliage and tubers precisely similar, it can scarcely be doubted that they are seminal variations. I saw one plant on the brow of the St. Gothard of an intermediate colour, with the peculiarities of the crimson plant."—*W. Herbert.*

65. ORNITHIDIUM miniatum.

O. *miniatum*; caulescens, pseudobulbiferum, foliis oblongo-loratis patentibus apice oblique rotundatis mox margine serrulatis, floribus axillaribus laxè exsertis, pedunculis unifloris, sepalis petalisque ovatis acutis glabris, labello basi concavo nectarifero apice trilobo laciniis lateralibus brevibus obtusis ascendentibus intermediâ latè ovatâ v. retusâ subundulatâ.

This plant has quite the habit of Ornithidium coccineum, but it is much handsomer: for the flowers are of rich crimson vermilion. Their lip is of quite another form; being distinctly three-lobed at the end, with the side lobe rising up, and the intermediate one broad, flat, rounded, and partially turned downwards; it is of a yellow colour, but edged and blotched with crimson. Messrs. Rollissons have flowered it; they imported it from Colombia.

66. PORPAX reticulata.

Among the many curious little plants, which in a collection like that of Messrs. Loddiges receive the same care as greater things, were a few button-like pseudobulbs, held close together by a slender rhizome, and received from the

East Indies without a name. Upon sprouting they produced a pair of little oblong leaves recurved at their point, and between the leaves peeped forth a small dull red flower, about three-quarters of an inch long. The structure of the flower was this. *Sepals* equal, rather spreading at the point, united at the edges into a tube; the lateral ones a little oblique and prominent at the base. *Petals* ovate, dull purplish red, very short. *Labellum* articulated loosely with the extended foot of the column, ovate, hastate, fleshy, serrate, with the sides of the base erect; and a single slender tooth standing up between the sides in the middle of the base. *Column* short, extended into a long foot, earless and wingless. *Anther* opercular, membranous. *Pollen-masses* 8, in pairs, one mass in each pair being smaller than the other. *Gland* and *caudicle* none.

No genus of Orchids has yet been described which will include this. It approaches nearest to Eria, but it has the habit of Trias and the calyx of Masdevallia. Its technical character may be stated thus:—

Porpax (Genus Eriæ affine sed habitu diversissimo.) *Sepala* subæqualia, in tubum connata, lateralia basi obliqua et pedi producto columnæ adnata. *Petala* nana, libera. *Labellum* carnosum, cum pede columnæ articulatum, basi tuberculo auctum. *Columna* nana, teres, aptera. *Pollinia* 8, per paria inæqualia.——Pseudobulbi *depressi, densè catenatim consociati, diphylli.* Flores *solitarii, sessiles, terminales.*

Sp. 1. *Porpax reticulata.*

Pseudobulbi depressi, mutuâ pressione subangulati, fibris pallidis pulchrè reticulati. Labellum serratum, tuberculo basali cornuto.

67. ERIA Dillwynii.

Hooker in Botanical Magazine, t. 4163.

E. *Dillwynii;* "pseudobulbis oblongis lævibus 2-4-phyllis, foliis oblongis racemis subæqualibus, bracteis membranaceis oblongis obtusis reflexis, racemis erectis, petalis sepalisque erectis, labello trilobo basi trilamellato, lobo medio obtuso rotundato 5-lamellato."

A native of the Philippines, whence Mr. Dillwyn Llewellyn received it from Cuming, and flowered it at Pennlergare in

March, 1843. It is a pale lemon-coloured species, with the habit of E. longilabris, and is said to be a most profuse flowerer. Mr. Llewellyn says that his plant had two spikes of flowers on each of eight pseudobulbs.—*Bot. Mag.*

It is not to be found among Cuming's dried plants.

68. BLANDFORDIA intermedia.

W. Herbert in litteris.

B. *intermedia;* foliis rigidis profundè angulatè canaliculatis acutè carinatis $\frac{3}{16}$ unc. latis viridibus margine scabro bracteis foliiformibus suberectis imâ $2\frac{1}{2}$ unc. superioribus gradatim minoribus caule ultrapedali apice florali brevi (2-unciali), floribus viginti vel ultra pedunculis subfulvis seriùs subvirescentibus $1\frac{3}{4}$-1-unc., perianthio subpendulo sesquiunciali, tubo inferne tenui infundibuliformi superne sexgibbato valde inflato ore ipso angustato pulcherrimè aheneo, limbo brevi ($\frac{1}{8}$ unc.) subreflexo latè luteo petalis latioribus subretusis antheras vix æquante, filamentis apice resurgenti-deflexis $\frac{5}{8}$ unciæ infra perianthii apicem medii tubi gibbis insertis inferne tubo adnatis.—*W. H.*

This beautiful plant now in blossom at Spofforth with twenty flowers, was imported by Messrs. Loddiges from New Holland, under the name of B. grandiflora. It approaches nearer to B. nobilis. It is to be observed that the filaments of B. marginata, which approaches more to B. grandiflora, are inserted one-eighth of an inch below the mouth of the tube, the limb being longer than in this plant. In B. nobilis the flower is much slenderer, only an inch and a quarter long, the middle of the tube inflated without the conspicuous knobs, and gradually constricted from the middle towards the mouth, which as well as the limb is bright yellow. Its filaments are inserted in the wide middle of the tube, and conform with those of B. intermedia, which is altogether a more robust and much finer plant.—*W. H.*

69. ELEUTHERINE anomala.

Botanical Register, 1843. *t.* 57.

When that remarkable plant, with six stamens to each of its flowers, though belonging to a triandrous genus, was figured in the Bot. Reg. from the collection of the Horticultural Society, it appeared to me that no dependence could be placed on the permanence of that phenomenon, even as a

seminal sport in the individual; but the plant from which the drawing had been made, was lost. Last spring I received, through the kindness of J. Dale, Esq. of Manchester, several similar bulbs, which he had just received from Java. These plants were in all respects like to Eleutherine anomala, excepting that, when they began to flower in March, they confined themselves to the legitimate number of three stamens. They produced a long succession of flowers, most of which I did not see; but yesterday (August 8) I observed one with four stamens, and from the same plant in a completely metamorphic state, another with four perfect stamens, a fifth anther upon a supernumerary or seventh small petal in the position of a stamen, and an eighth petal by its side without an anther. From this it may be collected, that the hexandrous plant might have returned to its proper habit, and the redundancy have proved to be only a sport of the season, tending to the production of a double flower. Hexapetalous triandrous plants are in fact in a defective state like the pentandrous Azaleas, amongst which Az. pontica (Rhododendron in a defective state) frequently produces at Spofforth six, seven, or more stamens, and one seedling of that species flowered double the first season, but never again. Some purchased Ixia bulbs flowered also full double two seasons, and afterwards reverted to single flowers.—*W. H.*

70. The Genus EPIDENDRUM.

In the miscellaneous pages of the Botanical Register the whole of the genus Epidendrum has now undergone revision, except that which may be called Epidendrum proper, consisting of species which cannot be referred to any of the other subdivisions, and which all correspond in having a leafy (not pseudobulbous) stem, a short peduncle without any scales or sheaths at its base, and the lip completely united to the column. They form an assemblage in which very different looking plants are collected; and which may therefore hereafter demand further subdivision. No means of separating them occurs however at present, and till a larger number shall have been critically examined, it will be as well they should remain in one group. The following is an entirely artificial distribution, without much reference to their affinity with one another.

§ EUEPIDENDRUM; caulis foliosus; pedunculus brevis esquamatus; labellum adnatum. *Lindl. in Hooker's Journal*, 3. 81.

a. Flowers solitary, or fascicled.

1. E. *equitans* (Lindl. in Bot. Reg. 1838. misc. 76); caule folioso ancipiti, foliis equitantibus ancipitibus lanceolatis acuminatis, flore solitario terminali pendulo, pedunculo ancipiti, spatha diphylla foliolo inferiore erecto foliaceo flore longiore, sepalis linearibus acuminatis patulis, petalis conformibus paulò brevioribus, labello ovato-lanceolato complicato cum columnâ basi connato medio trilamellato; lobo medio carnoso semitereti recurvo lateralibus erectis membranaceis integris.——*Mexico*.——A very curious species in its habit, which resembles Fernandezia very much. It is, however, a genuine Epidendrum, with a single flower of a dull chocolate brown.
2. E. *vesicatum* (Lindl. in Bot. Reg. 1838. misc. 89); caule elongato, foliis inflatis equitantibus carinatis acutis glaucis, floribus terminalibus fasciculatis carnosis foliis vix longioribus, sepalis lineari-oblongis acutis petalis conformibus angustioribus, labello subrotundo cordato lineâ mediâ tuberculisque duobus basilaribus elevatis, collo ovarii medio vesicato.——*Brazil*.——In habit this approaches E. equitans, but in the structure of both flowers and leaves it is widely different. The latter are covered with a glaucous bloom, imbricated, and more like inflated carinate bracts than true leaves. The flowers are greenish white, and offer some analogy with those of Physinga, but are in reality different from those of a genuine Epidendrum in nothing, except the neck of the ovary having an elevated semi-transparent blister near its middle. This blister is in fact the lower extremity of the cuniculus of the flower.

2 *bis*. E. *tolimense*; caulibus ramosis scaberrimis, foliis ovato-lanceolatis, floribus 2-3 terminalibus sessilibus coriaceis, sepalis lineari-lanceolatis acutis striatis, petalis setaceis, labello subcordato ovato concavo apice carnoso basi ecalloso intùs pubescente avenio.——*New Grenada*.——This species forms part of Mr. Linden's rich collection. It was found in the forests of Tolima, 10,000 feet above the sea. The flowers are small, and of a dull yellow

colour. The branches are excessively rough, with irregular asperities. The leaves are about 1½ inch long.

3. E. *piperinum* (Lindl. in Ann. Nat. Hist. 15. 236); caule ramuloso, foliis distichis succulentis oblongis obliquis obtusis laxe vaginatis, pedunculis brevissimis terminalibus subbifloris, sepalo dorsali petalisque filiformibus erectis lateralibus ovato-lanceolatis carinatis horizontalibus, labello ovato cochleato ecalloso venis radiantibus in margine confluentibus.——*Quito.*——A small succulent species, when dried beautifully netted. It looks like a *Peperomia.*

4. E. *lamellatum* (Lindl. in Bot. Reg. 1843. misc. 60); caule erecto flexuoso, foliis lanceolatis emarginatis glabris subcarnosis, corymbo sessili paucifloro, sepalis lanceolatis acutis, petalis obovato-lanceolatis, columnâ apice utrinque alatâ, labello obovato integerrimo v. obscurè emarginato basi transversim lamellato. —— *Honduras, Colombia,* (Linden, 710.)——Stem about a foot high. Flowers rose colour, about the size of those of E. Schomburgkii. Appendages at the apex of the column dark pink. Disk of labellum covered with a row of scaly yellowish plates.

5. E. *latilabre* (Lindl. in Bot. Reg. 1841, misc. 163); foliis ovatis obtusis brevivaginantibus internodiis sæpè brevioribus, sepalis petalisque angustioribus lineari-oblongis obtusis patentibus, labello repando sublobato emarginato basi bicalloso ferè 4-plò latiore quam longo, clinandrio laciniato, pedunculis 2-4-floris sessilibus.——*Tropical America.*——Allied to Epidendrum umbellatum, of which it has the habit. But its lip, which is four times broader than long, and curved downwards on each side, so as to bear no little resemblance to a stiffly starched lady's apron, gives it a most singular appearance. It is chiefly remarkable for its extensive geographical range. The plants in our gardens are all I believe from Brazil, where it has been found by many travellers. But it is also a native of Dominica; and Hartweg found it in the woods near Samborondan in Guatemala.

6. E. *umbellatum* (Swartz Prodr. 121. Nov. Act. Ups. 6. 68. Willd. no. 14. Bot. Mag. 2030. Hort. Kew. 5. 218. E. *difforme.* Jacq. Amer. 223. t. 136. E. *corymbosum.* Fl. Peruv. Syst. 246?); foliis distichis oblongis subundulatis obtusis, sepalis lineari-oblongis obtusis petalisque

16. E. *dichotomum* (Lindl. in Bot. Reg. 1838. misc. 146); fruticosum, caule fruticoso decumbente filiformi dichotomo, foliis angustè lanceolatis acutissimis corymbo terminali longioribus, sepalis lineari-lanceolatis, petalis conformibus angustioribus, labello cuniculato cordato obtusiusculo basi bicalloso.——*Demerara.*——A green-flowered species of no beauty, remarkable for its hard, wiry-looking stem.
17. E. *aggregatum* (Lindl. in Hooker's Journal, 3. 84.); foliis distichis lanceolatis acuminatissimis racemis oppositifoliis subsessilibus, brevissimis basi squamatis floribus corymbosis, labello adnato subrotundo cordato basi bilamellato.——*Peru.*——A very singular plant, allied to *E. cauliflorum.* The flowers are apparently as large as in *E. nutans*, but they have not been sufficiently examined.
18. E. *macrostachyum*; caule scabriusculo, foliis oblongis mucronulatis, racemo longissimo cernuo angulato, bracteis magnis duris ovato-cordatis reflexis, floribus coriaceis, sepalis oblongis obtusis, petalis filiformibus, labello cordato obtuso lævi basi valde concavo, clinandrio nudo. ——*New Grenada.*——This is a very singular species, with racemes more than a foot long, covered with distant leafy bracts full half an inch long. It was found by Mr. Linden, whose number 1279 it is, and who describes it as having green fleshy flowers, and a stem from two to three feet high.
19. E. *xylostachyum;* caule scabro, foliis oblongis obtusis coriaceis mucronulatis, spicâ strictâ flexuosâ durâ folio summo breviore, bracteis herbaceis cucullatis ovatis rigidis approximatis, floribus carnosis, sepalis oblongis concavis, petalis conformibus planis angustioribus, labello cordato ovato obtuso concavo margine recurvo, clinandrio integro.——*New Grenada.*——Another of Mr. Linden's discoveries. It is very like the last, but the bracts are larger, the spike is very short, the flowers are larger, and the petals are nearly as broad as the sepals, instead of being filiform.
20. E. *costatum* (Richard & Galeotti in Ann. Sc. 3 ser. 3. 22); "caule compresso; fol. elliptico-oblongis obtusis; flor. purpureis; racemo terminali: labello adnato orbiculari basi cordato crasso, costis divergentibus notato."—— *Mexico.*——

** Lip undivided, serrate or toothed.

21. E. *propinquum* (Richard, l. c.); "caule tereti; fol. oblongo-lanceolatis obtusiusculis; racemis 4-floris; flor. brunneis: labello adnato cordato, margine denticulato." ——*Mexico.*——

22. E. *ledifolium* (Richard, l. c.); "caule tereti; fol. lanceolato-linearibus obtusiusculis; flor. parvulis luteis racemum simplicem lateralem sessilem efformantibus: labello adnato, orbiculari vix acuto, denticulato-sinuoso." ——*Mexico.*——

23. E. *subulatifolium* (Richard, l. c.); "fol. teretibus subulatis acutis; scapo 4-5-floro; flor. intense luteis parvulis: labello suborbiculari integro, sinuoso."——*Mexico.*

24. E. *orgyale* (Lindl. in Ann. Nat. Hist. 12); caule orgyali distiche foliato, foliis ovato-oblongis margine vaginisque scabris, racemo sessili erecto cylindraceo bracteis membranaceis subulatis, floribus carnosis, sepalis ovalibus, petalis spathulato-linearibus serrulatis, labello cordato serrulato callis duobus juxta basin unoque sulcato minore sub apice.——*Santa Fé de Bogota.*——Stem five feet high. Flowers apparently yellow. The fistula of the ovary inflated.

25. E. *imbricatum* (Lindl. Gen. & Sp. Orch. no. 71); foliis distichis lineari-oblongis obtusis, caule ramoso, spicis ovato-oblongis imbricatis, sepalis petalisque ovatis acutis æqualibus erectis, labello ovato acuto obsoletè crenulato, bracteis carinatis obtusis.——*Brazil.*——

26. E. *fimbriatum* (H. B. K. 1. 351. *E. alternans*, Lindl. in Hooker's Journal, 3. 88); foliis distichis oblongo-linearibus oblique retusis margine vaginisque scabris, racemo angusto terminali, floribus subsessilibus, sepalis linearibus retusis, petalis conformibus serratis, labello subrotundo-ovato serrato bilamellato columnæ nanæ adnato. *Var.* α. bracteis ovatis herbaceis obtusis pedicello longioribus, racemo corymboso, floribus majoribus. *Var.* β. bracteis minimis acutis pedicello brevioribus, racemo flexuoso, floribus duplo minoribus.——*Peru.*——Slender plants about six inches high, with small racemose flowers. The *var.* β. is smaller in all its parts, but in the structure of the flowers themselves I find no appreciable difference.

*** Lip slightly lobed.

27. E. *tenue* (Lindl. in Hook. Journ. 3. 88); foliis distichis linearibus acuminatis oblique emarginatis, racemis acutis angustis simplicissimis (nunc casu quodam bifidis multifloris (10-20), bracteis ovatis acutis rigidis cucullatis pedicello longioribus, floribus erectis membranaceis, sepalis linearibus obtusis, petalis filiformibus, labello sessili ovato acuto concavo utrinque 1-dentato: venis baseos elevatis.——*Brazil.*——

28. E. *filicaule* (Lindl. Gen. & Sp. Orch. no. 23); caule gracili ramosissimo, foliis linearibus acutis, sepalis cuneato-oblongis acutis petalisque filiformibus patentibus, labello subrotundo cordato retuso repando, spicis terminalibus 3-floris, rachi capillari.——*Brazil.*——Flowers small, with three elevated lines at the base of the lip.

29. E. *scriptum* (Richard & Galeotti in Ann. Sc. 3 ser. 3. 22); "caule tereti; fol. elliptico-oblongis acutis; flor. viridulis, racemo simplici terminali: labello adnato obsoleto trilobo albo, lineis purpureis scripto."——*Mexico.*——

30. E. *longipetalum* (Richard & Galeotti in Ann. Sc. 3 ser. 3. 22. Orch. Mex. ined. t. 17); "caule compresso diphyllo; fol. approximatis lato-ellipticis subacutis: flor. pallide roseis: racemis paucifloris scapum pedalum terminantibus: sepalis internis linearibus externa duplo superantibus: labello cordato obsolete trilobo."——*Mexico.*——

31. E. *smaragdinum* (Lindl. in Bot. Reg. 1838. misc. 44); caule gracili ad fastigium ipsum folioso, foliis linearilanceolatis acuminatis subdistichis, spicâ terminali pauciflorâ rigidâ nutante foliis breviore, bracteis acuminatis squarrosis ovario ventricoso cuniculato brevioribus, sepalis lineari-oblongis acutissimis, petalis angustissimis acuminatis, labello cuneato cordato carnoso apice tridentato basi bicalloso: laciniis æquilongis lateralibus rotundato-truncatis intermediâ acutâ decurvâ.——*Demerara.*——A species closely allied to *E. orchidiflorum*, with small bright green flowers of no beauty whatever, and hardly distinguishable from the leaves.

*** Lip distinctly three-lobed.

32. E. *acuminatum* (Fl. Peruv. Syst. 248. L. no. 31); "foliis lanceolato-linearibus, racemo terminali, labello

subhastato acuminato basi utrinque auriculato."——*Peru.*——

33. E. *conopseum* (R. Br. in H. Kew. 5. 219. Nutt. Gen. 2. 198. Hooker in Bot. Mag. t. 3457. *E. Magnoliæ*, Muhl. Cat. 81); foliis binis radicalibus rigidis coriaceis, racemo laxo multifloro, sepalis linearibus obtusis petalisque angustioribus spatulatis patentibus, labello obcordato obtusè trilobo.——*Carolina and Georgia.*——Plant four inches high, or even smaller. Flowers small, yellow or green.
34. E. *lignosum* (La Llave Orch. Mex. 2. 28); caulibus ramosissimis lignosis, foliis distichis lineari-lanceolatis emarginatis fasciculatis, sepalis petalisque patentibus . . . . . ,, labelli 3-partiti laciniis lateralibus obtusis intermediâ convexâ integrâ, florum fasciculis sparsis. ——*Mexico.*——Flowers green, dotted. Lip with purple streaks at the base.
35. E. *scabrum* (Fl. Peruv. Syst. 248); "foliis ovato-lanceolatis marginibus vaginisque scabris, racemo terminali, labello cruciformi."——*Peru,* Valley of Banos, *Hall.* Andimarca, *Mathews* 1063.——
36. E. *chioneum*; caule lævi ramoso, foliis ovato-lanceolatis mucronulatis, racemo capitato cernuo, bracteis erectis herbaceis acuminatis ovario longioribus, sepalis subrotundo-ovatis, petalis obovatis serrulatis, labelli trilobi laciniis cuneatis integris lateralibus duplo minoribus, callis duobus cornutis, clinandrio altè marginato.—— *New Grenada.*——Found by Mr. Linden 12,000 feet above the sea. The flowers are pure white, in small close heads, an inch or more long. It is very near E. cernuum, but differs in the form of its sepals and the lobes of the lip, if that species is correctly described.
37. E. *cernuum* (Humb. et Kunth. Nov. Gen. et Sp. 1. 353); foliis oblongis obtusis coriaceis, spicâ cernuâ, sepalis lanceolatis margine revolutis cuspidatis, petalis conformibus paulò longioribus, labello trilobo margine reflexo: lobis lateralibus subrotundis intermedio triplò majore ovato obtuso.——*Popayan.*——Stem three feet high and more. Spike three inches long. Flowers sweet-scented, yellowish green.
38. E. *Arbuscula* (Lindl. in Benth. Pl. Hartw. p. 93); caule

tereti fruticoso ramoso, ramulis vestitis apice 2-3-phyllis, foliis oblongis coriaceis patentibus, racemis oblongis densis terminalibus subsessilibus cernuis, bracteis linearilanceolatis acuminatis membranaceis patentissimis pedicellis duplo brevioribus, sepalis oblongis acutis carnosis, petalis tenuioribus linearibus apice paullo latioribus, labello trilobo cordato basi tricalloso, laciniis lateralibus rotundatis, intermedia emarginata undulata.——*Mexico*. ——A plant with a large branching stem, leathery leaves, three or four inches long, and many pale stout roots. It is more curious than beautiful, resembling E. nutans in some respects, and quite destitute of brilliant colours. The flowers are a dull chocolate, only relieved by a patch of yellow in the middle of the labellum. The latter organ is so folded back at the sides and front, that although it is really almost circular, it has altogether the form of an old fashioned three-cocked hat.

39. E. *lacertinum* (Lindl. in Bot. Reg. 1841, misc. 109); floribus racemosis, ovariis subsecundis longissimis pendulis bracteis setaceis multoties longioribus, sepalis lanceolatis acuminatis, petalis lineari-lanceolatis, labelli adnati trilobi basi bilamellati laciniis lateralibus triangularibus intermediâ lineari acuminatâ elongatâ, antherâ immersâ, ovario cuniculato. —— *Guatemala*. —— The flowers hang down on long stalk-like ovaries from one side of a short raceme. They are bright green, with the exception of the column, which is yellow, and the lip which is a little stained with purple, and has very much the appearance of a lizard's tail, the hind legs being outside the flower, and the head and shoulders buried within the cup.

*** Lip 4-lobed, the middle division being emarginate or slit, or even 3-toothed.

40. E. *bifarium* (Swartz Fl. Ind. Occ. 3. 1509. Willd. no. 19. Swartz Prodr. 121); foliis distichis cordato-lanceolatis horizontalibus, spicâ terminali flexuosâ, rachi ancipiti, sepalis ovato-lanceolatis convexis, petalis brevioribus setaceis, labelli dilatati trilobi lobis lateralibus subrotundis integris: intermedio bilobo.——*Jamaica*.——Stem two

to four inches high. Flowers greenish white. Bracts somewhat falcate, keeled, as long as the ovary.

41. E. *cauliflorum* (Lindl. in Bot. Reg. 1838. misc. 82); caule tereti, foliis ovato-oblongis planis acuminatissimis, corymbis brevibus axillaribus e latere caulis erumpentibus, sepalis angustis oblongis patentissimis subæqualibus concavis, petalis linearibus apice cuneatis acutis reflexis, labello columnæ arcuatæ clavatæ omninò accreto cuneato-subrotundo trilobo; lobo intermedio truncato tridentato lateralibus rotundatis repandis, callis tribus linearibus in medio labelli lateralibus majoribus.——*Brazil.*——The flowers are about the size of those of E. *nutans*, of a pale straw-colour, and are remarkable for appearing from the side of the stout cylindrical stem, bursting forth from among the dry sheaths with which it is closely invested.

42. E. *patens* (Swartz Fl. Ind. Occ. 1. 1495. Willd. no. 10. Bot. Cab. t. 1537); foliis distichis oblongo-lanceolatis, racemo terminali, sepalis petalisque subæqualibus oblongis acutis concavis patentibus, labelli quadrilobi lobis lateralibus subrotundis: anterioribus linearibus obtusis conniventibus.——*Jamaica.*——Stem a span or foot high. Flowers pallid. Sepals keeled on the outside, and ferruginous.

43. E. *parviflorum* (Fl. Peruv. Syst. 245); "foliis lanceolato-linearibus, racemo brevi, labelli triiobi laciniis subrotundis: intermediâ bipartitâ acuta."——*Peru.*——What I take for this plant was found at Jambrasbamba by Mathews, and is no. 1900 of his herbarium. The raceme seems always to be forked.

44. E. *viride* (Fl. Peruv. Syst. 244); "foliis lanceolatis acutis, racemo terminali, labii trilobi laciniis lateralibus obcordatis, intermediâ bifidâ."——*Peru.*——

45. E. *torquatum* (Lindl. in Benth. pl. Hartw. p. 149); caule elongato aspero, foliis oblongis coriaceis obtusis distichis, spica sessili cernua, floribus coriaceis sepalis ovatis acutiusculis, petalis tenuioribus basi angustatis, labelli trilobi basi bidentati lobis lateralibus subtruncatis intermedio cuneato tridentato.——*Peru.*——Near E. scabrum, but with much larger flowers. A terrestrial plant. It varies very much in the size of the flowers.

***** Lip broken up into many divisions.

46. E. *cristatum* (Fl. Peruv. Syst. 243); "foliis lanceolatis, racemo dependente, labello tripartito: laciniâ mediâ bifidâ, lateralibus tripartitis."——*Peru.*——

47. E. *coronatum* (Fl. Peruv. Syst. 242); "foliis ovato-lanceolatis, racemis dependentibus, labello trilobo: laciniis bifidis intermediâ minori."——*Peru.*——

c. *Flowers panicled.*

* Lip undivided, quite entire at the edge.

48. E. *frigidum* (Linden MSS.); caule erecto indiviso undique foliato, foliis rigidis ovato-lanceolatis margine recurvis abruptè acutis, racemis paniculatis terminalibus multifloris pendulis, bracteis rigidis ovatis acutis squarrosis, floribus carnosis, sepalis subrotundo-ovatis subcarinatis rectiusculis, petalis linearibus, labello complicato transverso vix cordato basi bicalloso. ——*Colombia.*——This very singular plant has a stem a foot and a half high, densely covered with leaves, which are stiff, and curved back at the edge. The flowers, which are pale rose, grow in long drooping panicled racemes. Mr. Linden, who alone has found it, states that it grows *on wet rocks*, at *but little distance from the eternal snow*, at the height of 13,000 feet above the sea. He adds that it is especially remarkable for all the plant, flowers included, being covered over with varnish.

49. E. *Funckianum* (Richard & Galeotti Ann. Sc. 3 ser. 3. 22; Orch. Mex. ined. t. 16.); "caule articulato; foliis ovalibus obtusissimis apice bilobis; flor. parvulis brunneis paniculatis; labello adnato cordato, acuto." ——*Mexico.*——

50. E. *gramineum* (Lindl. Gen. et Sp. Orch. no. 30); foliis distichis lineari-lanceolatis acutis striatis, racemo terminali paniculato, sepalis oblongis acutis, petalis linearibus, labello cordato acuto medio plicato basi calloso.——*Peru.*——

51. E. *aquaticum* (Lindl. in Ann. Nat. Hist. 12); caule ancipiti ramoso, foliis lineari-oblongis acutis panicula simplici pauciflorâ (aut racemo) paulo brevioribus, sepalis oblongis petalisque linearibus obtusis, labello carnoso

alte cordato cucullato basi ecalloso, clinandrio utrinque bidentato.——*Brazil.*——The branches of this are four or five inches long, the leaves from half an inch to two inches. The flowers small and green. According to Mr. Gardner it is an aquatic.

52. E. *diffusum* (Swartz. Prodr. 121. Fl. Ind. occ. 3. 1503. Willd. no. 15. *Seraphyta multiflora* Fisch. Ann. Nat. Hist. viii. 471); foliis oblongis, caule ancipiti, paniculâ terminali ramosissimâ, sepalis lineari-lanceolatis petalisque setaceis erecto-patentibus striatis, labello cordato acuminato basi bicalloso.——*Jamaica, &c.*——Flowers small, red, in a loose panicle.

53. E. *vincentinum* (Lindl. in Hook. Journ. 3. 88); caule ancipiti, foliis distichis anguste lanceolatis acutissimis paniculâ pauciflorâ laxâ filiformi brevioribus, sepalis lineari-lanceolatis, petalis filiformibus, labello subrotundo crispo.——*St. Vincents.*——A small delicate species, not more than four inches high, with minute membranous flowers, disposed in a short, loose panicle; filiform pedicels.

54. E. *recurvatum*; foliis ensiformibus mucronatis strictis paniculæ gracili ramis longis recurvis æqualibus, bracteis apice setaceis, floribus membranaceis distantibus, sepalis ovato-oblongis, petalis lineari-spathulatis, labello altè cordato subquadrato ecalloso.——*Colombia.*——A plant with the habit of E. tridactylum, &c. but with rose-coloured flowers, which are three or four times as large. Found by Mr. Linden.

55. E. *micranthum* (Lindl. in Hook. Journ. 3. 88); foliis distichis lineari-lanceolatis acuminatis, paniculâ virgatâ, bracteis setaceo-acuminatis florum dissitorum longitudine, sepalis oblongis carnosis obtusis subæqualibus, petalis linearibus, labello oblongo quadrato indiviso nudo.——*Peru.*——A plant with flowers scarcely a line long, and all the habit of Ep. tridactylum.

** Lip more or less toothed, or two lobed.

56. E. *lineare* (Fl. Peruv. Syst. 249); "foliis linearibus, racemo terminali subpaniculato, labello obcordato-cuneiformi basi utrinque dentato."——*Peru*——

57. E. *volubile* (Fl. Peruv. Syst. 247); "foliis oblongo-

obovatis, ramis volubilibus, labelli bifidi laciniis lanceolatis."——*Peru.*——

58. E. *cordatum* (Fl. Peruv. Syst. 244); "foliis cordatis amplexicaulibus, paniculâ flexuosâ, labelli bifidi laciniis acuminatis recurvis."——*Peru.*——

*** Lip distinctly 3-lobed.

59. E. *carnosum* (Lindl. in Hook. Journ. 3. 87); foliis distichis ovato-lanceolatis acutiusculis: vaginis rugulosis, paniculâ rigidâ striatâ multiflorâ, bracteis duris ovatis cucullatis acutis ovarii longitudine, sepalis carnosis oblongis obtusis lateralibus hinc gibbosis carinatis latioribus, petalis sepalo dorsali conformibus, labelli postici trilobi carnosi lobis lateralibus rotundatis erectis intermedio conico solido.——*Brazil.*——A rigid plant, with the habit of Ep. elongatum. The panicle is stiff, many-flowered. Flowers are pale yellow; they are, when dry, hard, thick, and black, and evidently must be very fleshy when recent.

60. E. *durum* (Lindl. in Hook. Journ. 3. 87); foliis distichis ovato-lanceolatis acutis: vaginis rugosis, paniculâ simplici pauciflorâ, bracteis duris ovatis cucullatis acuminatis ovariis æqualibus, sepalis oblongis acutis duris striatis, petalis angustioribus, labelli postici trilobi transversè rhombei lobis lateralibus erectis truncatis intermedio triangulari acuto.——*Guiana.*——Stems simple or branched, from nine to eighteen inches high, equally covered with hard distichous leaves. Flowers small, apparently yellow. The inflorescence is occasionally simple.

61. E. *purum* (Lindl. in Bot. Reg. 1844. misc. 75); caule elongato tereti, foliis ensiformibus obtusis, floribus paniculatis ramis (3) racemosis gracilibus foliis paulo erectioribus, sepalis angustè lanceolatis, petalis linearibus, labelli tripartiti basi 5-costati laciniis ovatis acutis.——A Caracas plant, sent by Linden to Mr. Rucker, with whom it flowered in the beginning of September. The leaves are not half an inch wide, and six or eight inches long. The flowers are in a thin panicled raceme, of a light pale green colour, and about the size of those of E. *nutans*.

62. E. *tridactylum* (Lindl. in Bot. Reg. 1838. misc. 81); caule fusiformi gracili apice distichè folioso, foliis angustè

oblongis apice paulo angustatis obtusis cum mucronulo, spicâ terminali tripartitâ multiflorâ foliis longiore, sepalis subrotundo-ovatis patentibus incurvis lateralibus majoribus, petalis spathulatis linearibus apice incurvis, labello ascendente tripartito basi bicalloso: laciniis linearibus carnosulis lateralibus margine involutis intermediâ breviore planâ, columnâ brevi crassâ cuneatâ labello omninò adnatâ.——*Brazil.*——A plant, with smaller flowers than any other species of the genus yet in the gardens. They are a pale brownish yellow, except the column which is green, short, thick, and wedge-shaped.

63. E. *erubescens* (Lindl. in Hook. Journ. 3. 87. Bateman, Orch. Mex. et Guat.); foliis oblongo-lanceolatis acutis scapo pluries brevioribus, paniculâ amplissimâ flexuosâ, petalis unguiculatis sepalisque oblongis obtusis, labelli trilobi laciniâ intermediâ subrotundâ venis 3 elevatis lateralibus obovatis multò majore.——*Mexico.*——A magnificent plant, with very large panicles of delicate rose-coloured flowers as large as those of E. alatum.

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* * Lip 4-lobed.

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64. E. *floribundum* (Humb. et Kunth. Nov. Gen. et Sp. 1. 353. t. 86. Hooker in Bot. Mag. t. 3637); foliis lanceolato-oblongis acuminatis submembranaceis, paniculâ terminali, sepalis reflexis lanceolatis, petalis filiformibus, labelli quadrilobi basi bituberculati lobis lateralibus subrotundis, terminalibus linearibus divaricatis.——*Mexico, Surinam.*——

65. E. *verrucosum* (Swartz Fl. Ind. Occ. 3. 1497. Willd. no. 11. Lodd. Bot. Cab. t. 1084.); foliis distichis lanceolatis obliquè patentibus vaginis verrucosis, floribus subpaniculatis, sepalis oblongis concavis acutis petalisque lineari-lanceolatis patulis, labello 4-lobo laciniis linearibus obtusis divaricatis: anterioribus minoribus.——*Jamaica.*——Stems simple erect, two or three feet high. Sepals and petals pale green. Lip yellow. Scape radical, *Swartz.* Panicle terminal, *Loddiges.* May not two species be confounded under this name?

Crocorum Synopsi Addenda.

Vide supra 1843. *Misc.* 40. 126, *et seq.* 1845. *Misc.* 1. *et seq.*

Nudi.

71. C. *Dalmaticus* (Visiani Flora Dalm.); foliorum margine cartilagineo-denticulato, limbo saturatè violaceo concolore estriato, fauce luteâ. C. variegato Tergestino affinis reticulationis maculis subtilioribus, ulteriùs investigandus est. Vivum non vidi.—*W. H.*

72. C. *Veluchensis*; c. tunicâ vag. interiore supra med. c. affixâ, proximâ prope basim, ambabus duris colore stramineo pallido fibris reticulatis non cribrosis inferne parallelis, tertiâ exteriore tenuiore periturâ, foliaceis omnibus in vertice sitis breviter apiculatis, foliis sex vel ultra, spathâ (quatenus vidi) ebracteatâ, seminibus mediæ magnitudinis vel infra subangulatis subpallidis raphe pallidiore. Flore verno. *In monte Ætolico Veluchi effodit adolescens Leucadensis Pietro di Basili Vrioni ad hoc ipsud quærendum missus, in radicum et promontoriorum detrito subvirescenter griseo fortiorem, in fastigii solo subrufescente debiliorem, seminibus ad finem m. Junii maturis, stante adhuc nive in vertice, neque alium ibi Crocum invenit. Specimina in cacumine m. Veluchi m Julio lecta* 1842 *sub titulo C. nivalis, Bory, vulgavit Spruner, cormo satis conformi,* foliis 4 tempore florendi fl. æquantibus acutis ultra $\frac{1}{8}$ unc. latis, limbi laciniis $1\frac{1}{4}$ unc. obtusis stylum stamina æquantem $\frac{1}{4}$ unc. superantibus, filamentis antheras aureas longitudine superantibus, stigmatibus brevibus crassis subintegris apice denticulato, perianthio cœrulescente concolore. *C. nivalem esse credidissem, nisi cl. Gay C. nivalem* (*inspectis, puto, speciminibus ex Taygeto*) *eundem esse cum Sieberiano suo monuissit, a quo Veluchensis toto cœlo differt, Sieberiani scilicet* (*teste cl. Gay*) *t. foliac. ex imo c. orta, perianthii faux aurantiaca. C. Veluchensem igitur a C. nivali Taygetano, discedere aut nivalem cl. Gay Sieberiano suo Cretico speciminibus siccis deceptum infaustè adjecisse, constat. Specimen Sibthorpianum ex Cretâ faucem habere cœrulescentem jampridem monueram, neque ullum Sieberiani descriptioni conforme mihi vidisse contigit. Mons Veluchi* (Βελούχη *seu* Βελούχοι) *dictus,* 7200 *pedes altus, unde*

scaturigines fluminis Sperchei, in confinis Ætoliæ septentrionalibus situs est, ubi promontoria Othryos, Œtæ, et Pindi, convergunt.—W. H.

73. C. *sublimis;* C. tun. vag. duâbus tenuibus membranaceis, tertiâ interiore durâ pallidâ fortiter reticulatâ non cribratâ prope basim affixâ, t. foliaceis omnibus in vertice sitis fibris reticulatis, foliis circiter sex, spathâ bracteatâ? vel superne bifidâ? capsulâ apicem versùs purpureâ, seminibus parvulis oblongis glabris pallidis chalazâ saturatiore raphe pallidiore corrugatâ. *In excelsis altissimi montis Delphi in Eubœâ, stante adhuc nive in vertice, m. Junii effodit P. Vrioni, specimini Spruneriano ex hôc monte satis conformem,* cui tubus unc. vaginis exsertus spatham bracteatam æquans, limbus subuncialis violaceus (fauce, puto, luteâ) stigmata ferè integra antheras luteas superantia, germen vix vaginis inclusum, tun. durè, reticulatæ maculis angustis fibris inferne liberis, nullâ ad basim stellâ (ut in c. reticulato) persistente, foliaceis setosè apiculatis.—*Variat specimen alterum Sprunerianum ex monte Corydalo Athenis viciniore,* limbo majore, tubo longiùs exserto. *Species Sieberiano propinquior, non verò "petiolo inferiore ex imo tubere orto," sed ex vertice. Flore verno.*—W. H.

74. C. *Cancellatus,* var. *margaritaceus* (v. Naupliensi supra 1843. Misc. 40. cui limbus forsan in vero non purpureus est, propinquus); c. tun. vag. tenuibus membranaceis stellâ ad basim persistente tenui, foliaceâ exteriore imo c. affixâ durâ angustè densè reticulatâ demum cribrosâ, foliacearum omnium apicibus in fibras longas setosas rigidas resolutis, spathâ albescente bracteatâ unc. circ. exsertâ, bracteâ in unifloris tubatâ, tubo longè exserto, limbo ultra sesquiunciali subalbo venis omnibus intus pallidè cœrulescentibus fauce lutescente lævi, laciniis subobtusis concavis extus ad basim lac. cujusque violaceo saturatè tristriatis striis decurrentibus mediâ majore lateralibus inferne proximæ concurrentibus superne subramosis, sepalis petala pallidiora superantibus, antheris aureis, filamentis brevibus albis lævibus, stylo limbum subæquante aurantiaco, stigmatibus multifidis inodoris, floribus successivis, foliis lævibus parum hysteranthiis. *In radicibus montis Delphi in Eubœa effodit P. Vrioni. Floruit Spofforthiæ Oct.*

—— Var. *Mazziaricus* (C. Mazziaricus, nobis 1845. Misc. 4. ex sicco); c. tun. vag. stellâ persistente fortiore, t. fol. basi minus (quatenus novi) approximatâ, limbo estriato. *In Leucadis monte humili Phaneromeni, et in excelsis montis alti Megaoros dicti effodi. Prope Cariam culturâ extirpatus est. Similem tunicas, folia, et semina magna brunnca, in monte Œno Cephallensi intra ped.* 3000 *et* 3300 *alt. inveni, flore nondum viso. Similem ferè, sed minorem, prope Epidaurum effodit P. Vrioni.*

—— Subvar. striatus; flore minore, tubo et fauce extus purpurâ striatâ saturatiùs luteis. *In excelsis montis Cephallensis Ruthi* (Ῥούθη, *vulgò Rŭth*) *effodi.*

75. C. *Ionicus* (nobis supra 1845. Misc 5.); c. tun. lævissimis brunneis, vaginaceis inferne laceris, foliaceâ exteriore circiter cormo medio (supra, vel infra) affixâ, limbo candidissimo fauce lævi aurantiacâ, antheris candidis, filamentis aureis pubescentibus, foliis proteranthiis depressis lævibus, spathâ breviter exsertâ bracteatâ apice virescente. *In collibus humilioribus saxosis Corcyræ, et Leucadis Maracandoræ, Diamiliano et S. Petro, effodi. Floruit apud me Oct. et seriùs. Croco Tournefortiano affinis, et vix, nisi colore, præsertim fauce aureâ, distinguendus. Ni fallor, C. Boryanus, definitione Gayanâ ex sicco minimè idoneâ, antheras candidas, filamenta pubescentia aurantiaca, et posituram tun. fol. exter. incertam habet, neque diversus ab Ionico nostro esse invenietur. Non verò præsumenda est nobis diversitas tam conspicua a speciebus cognitis, si vera, ab auctoribus neglecta, et conjecturâ nostrâ solummodo prolata.* C. Tournefortiani faux pallida est; C. Venerei (Tappeina) lutescens; quare Boryano, non Tournefortiano, varietas adjiciendus est C. Venereus ex Cypro, si ambobus antheræ aureæ sunt, ut silentio auctorum censendum est; Ionico, si candidæ, uti suspicor.—*W. H.*

Involucrati.

76. C. *Vallicola* (supra 1845. Misc. 3.); cormo e minimis, tun. præcipuâ tenuissimè membranaceâ fibris parallelis superne confluentibus, proximâ in vertice tenui membranaceâ, antheris albis.—*W. H.*

77. C. *Hadriaticus*; c. tun. absque stellâ ad basim persistente, vag. exter. tenuissimâ membranaceâ, proximâ

simili fibris confluentibus, interiore duriore crassiore fibris subtiliter reticulatis prope fundum affixâ, tun. foliaceis breviter apiculatis exteriore circ. med. c. affixâ densè undulato-reticulatâ, cæteris similibus summo c. affixis, antheris aureis, stigmatibus indivisis superne incrassatis odoratis, foliis proteranthiis suberectis lævibus.

—— Var. *Chrysobelonicus*; t. fol. ext. c. medio aff. limbo albo fauce lævi aurantiacâ extus sæpe rubro livido notatâ vel striatâ, filamentis albis lævibus. *In colle saxoso* Χρυσοβελώνη *in Leucade effodi, ubi P. Vrioni primus invenerat. Floret Octobri.*

—— Var. *Saundersianus*; t. fol. ext. supra c. medium aff. limbo albescente fauce saturatè aurantiacâ, quatenus vidi, estriatâ. *Ex colle Bisdun dicto, ubi fuit Dodona vetus, prope urbem Janina dictam apud Albanos Epirenses operâ benignâ misit S. S. Saunders consul Britannicus. Floret Dec. Januar.—W. H.*

78. C. *Visianicus*; nisi forsan E. Hadriatici var. Visianicus. *C. Pallasianus, Visiani Flora Dalmat. excl. synonymis.* c. tun. in sicco satis c. Hadriatico ut videtur, conformibus; fauce luteâ a C. Pallasiano Taurico et a C. Thomasiano Italico differt. *Vivum non vidi. Floret autumno in Dalmatiâ.—W. H.*

Observ. Crocos tot et tam diversos Corcyrences ab auctore anonymo (Mazziari) in Anthol. Ion. prolatos multo studio indagatus, Trichonema non Crocum locis indicatis inveni, et nomen Mamálokes non Croco verno, sed Trichonemati in cacumine Palæocastritzæ. ab indigenis, a quibus cormi comeduntur, datum esse comperui; C. Ionicum solum ex Corcyrâ teneo. C. Suteriano folia dorso sunt ciliata. C. lævigatus crescit etiam in Hymetto, et fl. cœruleo, albo ac variegato, prope domum sanitatis urbem juxta Zeitun dictam. C. lagenæflorum v. Olivieranum (C. Olivieri, Gay) a Rhodosto in Roumeliâ accepi, similemque ferè ex Byzantii viciniâ. Lagenæfloris omnibus capsula apiculata spathâ persistente obvoluta est, cormusque spontaneus 4-5-uncias sub terrâ situs est. Solo arenoso supra argillam gaudent.—*W. H.*

79. IRIS stylosa.

This beautiful plant, which was first noticed by Desfontaines, in his Flora Atlantica, has never been cultivated either

in this country or on the continent. Its leaves are about a quarter of an inch wide, spreading in a flat tuft; its large gaudy flowers supported, like those of the Crocus, by a long tube from an underground germen, the tube being five or six inches long. It is found from a little above the sea level to the summit of most, if not all, of the mountains in Corfu and Santa Maura, but does not reach the loftier bare top of Mount Œnos in Cephalonia, and it is said that some of the steeps of Corfu are in a blaze of blue from its flowers in January or February. Dispersed as it is, it seems strange that its seed cannot be obtained without great difficulty. A vast number of the most promising plants were dug up in Santa Maura in May, in the vain hope of obtaining a capsule, and with the help of a native, who well knew the difficulty. At last, in passing over Mount Rondi, in Cephalonia, I observed a dead plant of this Iris hanging by a root to the upper edge of a land slip, with a capsule, and having with difficulty scrambled up to it, I found one seed in it, which I brought home, and it has vegetated, as well as the plants which were dug up, but which I had not felt sure of being able to preserve alive. It remains to be ascertained, whether they will endure the climate of the interior of England. In the Ionian islands they seemed to be co-extensive with the white and the rose-coloured sage-leaved Cistus, which appear to me to be varieties of one species, growing quite promiscuously on the poorer slopes, though in the stronger soil where Malope Malacoides grew, I observed the red flowering later and alone. They are both liable to be killed with us by frost, except on dry banks in favoured parts of the island.

W. H.

80. SERAPIAS cordigera.

I believe this plant to be a fine variety of Serapias longipetala. The latter is abundant in Corfu in the open spaces amongst the Cistus, oak, myrtle, Schinus, and other shrubs, which are kept in a dwarf state by the goats, with the lip very variable in size, and sometimes almost obsolete, and S. cordigera, with the larger lip, is found intermixed with the inferior sort, the colour of both being a dark brick red, varying to a dirty white. They are most plentiful on the less fertile slopes, but grow stronger when found in a richer and lower position.—*W. H.*

81. OPHRYS Arachnites.

The name Arachnites originates with Scopoli, who applied it to an Orchis, of which he made three varieties, two being in fact Orchis, and otherwise named. The third, to the appearance of which the name was adapted, was Ophrys Arachnites of Zaule, near Trieste; a plant before unnoticed, and not exactly similar to that of Switzerland and Kent, though it may be very proper to consider the latter as a variety of the true Arachnites, which has a very different aspect, and a shorter, rounder lip, and other distinctions. That which has been sometimes called Arachnites in Corfu is O. cornuta, distinguished by the prolongation of the shoulder of the lip into a long horn, but otherwise closely allied to Arachnites, which it resembles in its general appearance, though it grows taller. The bee orchis of England grows in Corfu, and is occasionally, though rarely, found with a yellow lip, and white segments to the flower, in which state it is the once-found Ophrys chlorantha of the Swiss Flora.—*W. H.*

82. CYTINUS Hypocistis.

This plant is figured in the Flora Græca, by a mistake, as if it were of a uniform dead-leaf, or pale straw-colour; and, as the plant is not known in this country, the representation and description there given have passed for correct. The account of the genus in Endlicher's Genera Plantarum, gives no insight into the colour of such plants. The reader will be surprised to hear, that the real colour of the flowers is pure white, and of the rest of the plant intense scarlet. The plant grows from the underside of the roots of a Cistus, and I found it pretty abundant in May, towards the rocky summit of Santa Decca, 2,300 feet high, in Corfu. I first saw the plants, which, on account of their splendid colour, had been gathered by the Greeks, strewed about the street in the village, half way up the hill. The form of the Cytinus, when it breaks through the ground, is club-shaped, tapering downwards; it is three or four inches long, and about as thick upwards as a man's thumb: it is clothed with close-set scarlet bractes, which after a while disclose the upper surface of a cluster of white fleshy flowers, which have some resemblance to short thick jasmine flowers. Several of these sprouts spring from

one cistus root, some close together, and some separate; nor is it easy to ascertain whether more than one knob proceed from the same individual. I cannot tell whether the plant requires strength underground during more than one season before it flowers, but I suspect that it perishes after blossoming.— *W. H.*

83. LANKESTERIA parviflora.

Among the curious things found in Sierra Leone by Mr. Whitfield is this Acanth, which is remarkable for its slender tubed yellow flowers, with the border all on one side, and changing to white. It has been flowered by Mr. Glendinning and will shortly be figured by us. It is a very pretty evergreen stove plant, and for the moment may be thus defined :—

LANKESTERIA. *Spicæ* breves, imbricatæ, axillares. *Calyx* 5-phyllus, æqualis, bibracteatus. *Corolla* tubo gracili, limbo secundo 5-partito. *Stamina* 2, sterilibus 0, semiexserta; *antheræ* 2-loculares, muticæ. *Stigma* simplex, capitatum. *Capsula* pedicellata, loculicido-bivalvis, abortu disperma. *Semina* plana pilis marginata, retinaculis uncinatis subtensa.

1. L. *parviflora*; foliis obovatis obtusiusculis, corollæ tubo calyce haud multum longiore.

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TO THE

BOTANICAL REGISTER,

FOR THE YEARS 1838 TO 1845.

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——— ———	1845	14	..
Calectasia cyanea	1841	..	13
Caliphruria Herbertiana	1844	..	83
Callipsyche eucrosioides	1842	..	49
——— ———	1845	45	..
Callistemon microstachyum	1838	7	..
Caloscordum Neriniflorum	1844	..	64
Calostemma carneum	1840	26	..
——— luteum	1840	19	..
Calystegia sepium	1838	..	104
Calydorea	1843	..	138
Camarotis obtusa	1844	..	71
Camellia Japonica Halleii	1845	..	48
Campanula grandis	1842	..	41
——— Lœflingii	1842	..	64
——— ———	1843	19	..
Candollea tetrandra	1842	..	39
——— ———	1843	50	..
Caragana triflora	1845	..	56
Carpesium pubescens	1838	..	123
Catachætum recurvatum	1845	..	31
Catasetum cornutum	1840	..	182
——— ———	1841	5	..
——— callosum	1840	..	183
——— ———	1841	5	..
——— deltoideum	1840	..	157
——— maculatum	1840	62	..
——— ———	1840	.	99
——— Milleri	1838	..	140
——— Naso	1843	..	111
——— ochraceum	1844	..	55
——— poriferum	1838	..	164
——— abruptum	1842	..	24
——— atratum	1838	63	114
——— globiflorum	1842	..	48
——— proboscideum	1839	..	140
——— ———	1841	5	..
——— planiceps	1843	9	..
——— longifolium	1839	..	154
——— laminatum	1841	5	..
——— lanciferum	1841	5	..
——— discolor	1841	..	12
——— fuliginosum	1841	..	168
——— roseo-album	1840	..	135
——— spinosum	1840	..	136
——— Russellianum	1840	..	19
——— saccatum	1840	..	179
——— Trulla	1840	..	176
——— ———	1841	34	..
——— tridentatum	1844	..	40
——— Wailesii	1843	..	1
Catha paniculata	1843	..	45
Cattleya Aclandiæ	1840	48	..
——— Arembergii	1843	..	123
——— bicolor	1838	..	148
——— granulosa	1842	1	..
——— ——— var. Russelliana	1845	59	..
——— Papicansiana	1845	..	47
Cattleya Perrinii	1838	2	..
——— pumila	1844	5	..
——— Mossiæ	1840	58	..
——— Skinneri	1840	..	83
——— superba	1839	..	47
Ceanothus pallidus	1840	20	..
——— divaricatus	1843	..	55
——— Thyrsiflorus	1844	38	..
Centaurea pulchra	1839	..	84
——— ———	1840	28	..
Centranthera punctata	1843	..	11
Centradenia rosea	1843	20	..
Centropogon cordifolius	1841	..	192
Ceradia furcata	1845	..	13
Cereus leucanthus	1840	13	..
——— crenatus	1844	31	..
——— speciosissimus, var.	1842	49	..
——— biformis	1843	..	66
Cestrum aurantiacum	1844	..	65
——— ———	1845	22	..
Chænanthe Barkeri	1838	..	60
Cheiranthus ochroleucus	1840	..	29
Cheirostylis parvifolia	1839	..	20
Chirita sinensis	1844	59	..
Chloræa virescens	1845	49	..
Chorozema cordatum	1838	10	..
——— spectabile	1841	45	66
——— varium	1839	49	63
Chysis lævis	1840	..	130
——— bractescens	1840	..	131
——— ———	1841	23	..
Cirrhea saccata	1836	..	121
Cirrhopetalum cornutum	1838	..	138
——— chinense	1842	..	29
——— ———	1843	..	49
——— cæpitosum	1838	..	53
——— Macræi	1841	..	105
——— Medusæ	1842	12	..
——— maculosum	1841	..	173
——— Thouarsii	1838	11	..
——— nutans	1839	..	118
——— Wallichii	1839	..	119
——— fimbriatum	1839	..	120
——— picturatum	1840	..	106
——— auratum	1840	..	107
——— ———	1843	..	61
——— vaginatum	1840	..	173
——— ———	1842	12	..
Citrus deliciosa	1841	..	44
Cleisostoma latifolium	1840	.	127
——— dealbatum	1844	..	5
——— decipiens	1844	..	16
——— maculosum	1840	..	67
——— tridentatum	1838	..	46
——— roseum	1838	..	150
——— discolor	1845	..	61
Clematis florida, var. bicolor	1838	25	..
——— lathyrifolia	1839	61	..
——— montana	1840	53	..
Cleome lutea	1840	..	117
——— ———	1841	67	..
Clethra mexicana	1840	..	51
——— quercifolia	1842	23	..
Clerodendron fragrans	1838	41	..
——— infortunatum	1844	19	..
——— splendens	1841	..	177
——— squamatum	1842	7	..
Clianthus carneus	1841	51	9

		pl.	misc.
Epidendrum radiatum	1844	45	..
——— raniferum	1841	..	122
——— ———	1842	42	..
——— virgatum	1841	..	189
——— gladiatum	1841	..	20
——— glutinosum	1843	..	124
——— viviparum	1841	..	27
——— miserum	1841	..	62
——— Lindenii	1845	..	59
——— lamellatum	1843	..	60
——— limbatum	1843	..	104
——— leiobulbon	1841	..	63
——— microphyllum	1841	..	71
——— hastatum	1841	..	90
——— aciculare	1841	..	98
——— lacertinum	1841	..	109
——— leucochilum	1843	..	120
——— phœniceum	1841	..	120
——— selligerum	1838	..	66
——— tibicinis	1838	..	12
——— tessellatum	1838	..	9
——— tridactylum	1838	..	81
——— rufum	1845	..	42
——— varicosum	1838	..	37
——— verrucosum	1844	51	..
——— vesicatum	1838	..	89
——— aurantiacum	1838	..	11
——— ———	1840	..	82
——— aspersum	1838	..	36
——— altissimum	1838	..	61
——— Boothianum	1838	..	7
——— cucullatum	1838	..	47
——— chloranthum	1838	..	28
——— marginatum	1845	..	21
——— cauliflorum	1838	..	82
——— calamarium	1838	..	163
——— dichotomum	1838	..	146
——— diotum	1843	..	97
——— dichromum	1843	..	119
——— equitans	1838	..	76
——— fucatum	1838	..	17
——— ionosmum	1838	..	87
——— longicolle	1838	..	49
——— lacerum	1838	..	18
——— lividum	1838	..	91
——— ochraceum	1838	26	15
——— Ovulum	1843	..	71
——— variegatum	1839	11	..
——— glumaceum	1839	..	50
——— ———	1840	6	..
——— grandiflorum	1844	..	82
——— Candollei	1839	..	77
——— inversum	1839	..	135
——— uniflorum	1839	..	13
——— Skinneri	1840	..	81
——— ———	1844	..	24
——— incumbens	1840	..	84
——— machrochilum	1840	..	85
——— Stamfordianum	1840	..	88
——— rhizophorum	1840	..	91
——— ———	1838	..	10
——— rubrocinctum	1843	..	20
——— Hanburii	1844	..	60
——— arbuscula	1843	..	54
——— aromaticum	1840	..	93
——— bractescens	1840	..	122
——— densiflorum	1840	..	134
——— purum	1844	..	75

		pl.	misc.
Epidendrum crispatum	1840	..	35
——— lancifolium	1840	..	152
——— ———	1842	50	.
——— falcatum	1840	..	20
——— Parkinsonianum	1840	..	20
——— glaucum	1840	..	56
——— vitellinum	1840	..	35
——— stenopetalum	1840	..	49
——— Trinitatis	1840	..	128
——— viscidum	1840	..	190
Epimedium violaceum	1840	43	..
Epiphora pubescens	1840	..	143
Eremostachys laciniata	1845	52	..
Eria clavicaulis	1840	..	220
—— Dillwynii	1845	..	67
—— cochleata	1844	..	23
—— acutifolia	1842	..	32
—— bipunctata	1841	..	179
—— ferruginea	1839	35	..
—— bractescens	1841	..	46
—— ———	1844	29	..
—— longilabris	1841	..	69
—— armeniaca	1841	42	70
—— pulchella	1841	..	106
—— profusa	1842	..	3
—— floribunda	1843	..	56
—— ———	1844	20	..
—— multiflora	1843	..	72
—— polyura	1841	..	114
—— ———	1842	32	..
—— mucronata	1842	..	27
—— convallarioides	1841	62	121
—— paniculata	1842	..	33
—— pannea	1842	..	79
—— nutans	1840	..	196
—— planicaulis	1840	..	4
—— pumila	1838	..	147
—— velutina	1840	..	209
—— vestita	1844	..	79
—— ———	1845	2	..
Erica chloroloma	1838	17	..
Erigeron squarrosum	1841	..	92
Eriphilema	1843	..	137
Erysimum Perofskianum	1839	..	79
Erythrochiton Brasiliensis	1843	47	..
Eucalyptus calophylla	1841	..	157
Eulophia squalida	1841	..	164
Euonymus japonicus	1844	6	..
Euphorbia rigida	1838	43	..
——— veneta	1838	6	..
Eurybia glutinosa	1839	..	112
——— chrysotricha	1841	..	47
Euthales macrophylla	1840	..	119
——— ———	1841	3	..
Eustŏma exaltatum	1845	13	..
Eysenhardtia amorphoides	1839	..	55
Fabiana imbricata	1839	59	..
Fernandezia lunifera	1839	..	147
Friesia peduncularis	1843	..	108
Fritillaria Kotschyana	1844	..	52
——— lusitanica	1845	..	55
Fuchsia fulgens	1838	1	..
——— serratifolia	1845	41	..
——— cylindracea	1838	66	97
——— cordifolia	1841	70	117
——— radicans	1841	66	167
——— corymbiflora	1840	70	202
——— splendens	1842	67	..

		pl.	misc.
Fuchsia Standish's	1840	2	..
Funkia Sieboldi	1839	50	..
Galanthus reflexus	1845	..	44
Galbanum	1839	..	107
Galeandra Baueri	1840	49	..
——— cristata	1844	..	69
Gardenia Stanleyana	1845	47	..
Gardoquia betonicoides	1838	..	159
Garrya laurifolia	1840	..	53
Gaylussacia Pseudo-vaccinium	1842	62	..
Genista bracteolata	1840	23	..
——— virgata	1844	11	..
Geranium rubifolium	1840	67	..
——— erianthum	1841	..	91
——— ———	1842	52	..
——— tuberosum	1839	10	..
Gesnera vestita	1845	..	27
——— reflexa	1840	..	39
——— Suttoni, white var.	1842	..	40
——— longifolia	1841	..	190
——— ———	1842	40	..
——— discolor	1841	63	96
——— Zebrina	1842	16	..
Gladiolus crispiflorus	1842	..	81
——— caucasicus	1842	..	82
——— æquinoctialis	1842	..	97
——— festivus	1844	..	87
——— oppositiflorus	1842	..	98
——— splendens	1843	..	61
Glaucium rubrum	1839	..	78
Glossocomia ovata	1842	3	..
Gloxinia speciosa	1844	48	..
——— tubiflora	1845	3	..
Glumosia	1843	..	139
Godetia albescens	1841	..	131
——— ———	1842	9	..
——— grandiflora	1841	..	132
——— ———	1842	61	..
Gompholobium versicolor	1839	43	62
Gonatanthus sarmentosus	1841	..	83
Gongora fulva	1839	51	..
——— bufonia	1841	2	..
——— vitellina	1841	..	4
——— maculata	1841	..	101
——— maculata var. tricolor	1844	..	30
——— nigrita	1839	..	86
——— truncata	1843	..	52
——— ———	1845	56	..
Goodyera rubicunda	1839	..	92
Goodenia grandiflora	1845	29	..
Govenia	1845	..	67
——— Gardneri	1839	..	51
——— lagenophora	1839	..	66
——— liliacea	1838	13	..
——— fasciata	1843	..	107
Grammatophyllum multiflorum	1838	..	80
——— ———	1839	65	..
——— var. tigrinum	1842	69	..
Grevillea Thielemanniana	1839	..	72
Grobya galeata	1840	..	197
Guaiacum officinale	1839	9	..
Gunnia picta	1838	..	77
Habenaria candida	1844	..	77
Habranthus pratensis	1842	35	..
——— concolor	1845	54	..
——— nobilis	1844	..	84
Habrothamnus fasciculatus	1843	..	73
——— purpureus	1844	43	19
——— cyaneus	1844	..	68
Hæmanthus magnificus	1841	..	153
Hakea ruscifolia	1841	..	158
Hardenbergia digitata	1840	60	142
Hartwegia purpurea	1840	..	96
——— ——— var. angustifolia	1843	..	58
Heimia salicifolia	1841	60	..
Helcia sanguinolenta	1845	..	27
Helichrysum scorpioides	1838	..	84
Helleborus lividus	1838	55	..
——— orientalis	1841	..	112
——— ———	1842	34	..
——— olympicus	1841	..	113
——— ———	1842	58	..
Hemiandra emarginata	1841	..	156
Herbertia Drummondiana	1842	..	83
Heteropteris undulata	1841	..	48
Hexadesmia fasciculata	1842	..	46
——— ———	1843	..	21
——— bicornis	1844	..	44
——— micrantha	1844	..	5
Hexopia crucigera	1840	..	90
——— ———	1844	..	4
Hibbertia perfoliata	1841	..	94
——— ———	1843	..	64
Hibiscus Cameroni	1840	..	31
——— Cameroni fulgens	1844	28	..
——— Wrayæ	1840	69	149
Higginsia mexicana	1841	..	137
Hindsia violacea	1844	40	43
Hippeastrum organense, var. compressum	1842	..	35
Hoitzia mexicana	1838	..	21
Hormidium	1839	..	13
Hoteia japonica	1839	..	133
Houlletia vittata	1841	69	100
Hoven crispa	1839	..	19
——— pungens	1839	..	28
——— Manglesii	1838	62	..
——— racemulosa	1842	..	36
——— ———	1843	4	..
——— ilicifolia	1844	58	..
Hoya coriacea	1839	18	..
——— ———	1840	..	1
Huntleya Meleagris	1838	..	20
——— ———	1839	14	..
——— violacea	1839	..	17
Hybanthera cordifolia	1845	..	33
Hydrangea japonica	1844	61	..
Hydromestus maculatus	1843	..	46
Hydrotænia Meleagris	1838	..	128
——— ———	1842	39	..
——— lobata	1844	..	63
Hymenocallis Harrisiana	1840	..	63
——— bistubata	1844	..	53
——— panamensis	1841	..	146
——— rotata	1840	..	55
——— Skinneriana	1843	..	59
Hypocalymna robustum	1843	8	..
——— angustifolium	1843	..	78
——— suavis	1844	..	32
Hypocyrta discolor	1845	..	28
Impatiens candida	1840	..	204
——— ———	1841	20	..
——— rosea	1841	27	22

		pl.	misc.
Impatiens glanduligera	1840	22	..
—— macrochila	1840	8	..
—— tricornis	1840	9	..
Indigofera Dosua	1842	57	..
—— stachyodes	1843	14	..
Inga Harrisii	1839	41	..
Iochroma tabulosa	1845	20	..
Ionopsis teres	1838	..	181
Ipomœa ficifolia	1840	..	221
—— ——	1841	12	..
—— cymosa	1843	24	..
—— longifolia	1839	..	124
—— ——	1840	21	..
—— batatoides	1841	36	23
—— pendula	1840	..	201
—— Purga	1839	..	136
—— tyrianthina	1838	..	162
—— Schiedeana	1838	..	22
Iris deflexa	1840	..	42
— ——	1840	..	62
— fragrans	1840	1	..
— imbricata	1845	35	..
— stylosa	1845	..	79
Ismene deflexa	1839	..	142
—— virescens	1841	12	..
Isochilus lividum	1839	..	45
—— grandiflorum	1841	1	..
—— graminifolium	1841	1	..
Isopogon roseus	1842	..	37
Isotropis striata	1839	..	61
Ixiolirion montanum	1844	66	..
Jasminum caudatum	1842	36	..
—— subulatum	1842	..	58
—— affine	1845	26	..
Juniperus tetragona	1839	..	102
—— flaccida	1839	..	103
—— mexicana	1839	..	104
—— squamosa	1839	..	189
Lælia	1845	..	69
— furfuracea	1839	26	..
— autumnalis	1829	27	..
— albida	1839	54	4
— ——	1843	..	16
— flava	1839	..	143
— ——	1842	62	..
— majalis	1839	..	42
— ——	1844	30	..
— caulescens	1841	1	..
— acuminata	1841	24	42
— peduncularis	1842	..	10
— superbiens	1840	..	87
— rubescens	1840	41	25
— virens	1844	..	2
Labisia pothoina	1845	48	..
Lacœna bicolor	1843	..	101
—— ——	1844	50	..
Lalage hoveæfolia	1841	..	75
Lathyrus Armitageanus	1840	..	14
Lavatera maritima	1838	..	140
Lemonia spectabilis	1840	59	..
Lennea robinioides	1845	..	15
Leochilus carinatus	1842	..	22
—— cochlearis	1842	..	22
—— herbaceus	1844	..	90
—— oncidioides	1842	..	22
—— sanguinolentus	1844	..	91
Leptodermis lanceolata	1839	..	131
Leschenaultia biloba	1842	2	..

		pl.	misc.
Leycesteria formosa	1839	2	..
Lilium testaceum	1842	..	51
—— ——	1843	11	..
—— Thunbergianum	1839	38	..
—— Thomsonianum	1845	1	..
Linaria delphinioides	1840	..	15
—— grandulifera	1841	..	51
—— venosa	1841	..	151
Lindenia rivalis	1841	..	130
Lindleya mespiloides	1843	..	83
—— ——	1844	27	..
Liparis pendula	1838	..	180
—— alata	1843	..	12
—— spathulata	1840	..	189
Lissanthe stellata	1840	..	2
—— ——	1840	..	13
—— verticillata	1840	..	26
Lissochilus parviflorus	1838	..	14
—— roseus	1843	..	37
—— ——	1844	12	..
Loasa lateritia	1838	22	..
Lobelia discolor	1840	..	211
—— pyramidalis	1841	..	170
—— subnuda	1840	..	211
—— fenestralis	1838	47	..
—— multiflora	1840	..	17
—— Texensis	1845	..	25
Lonicera diversifolia	1843	..	118
—— ——	1844	33	..
Lopezia lineata	1840	40	60
Luisia alpina	1838	..	101
Lupinus arboreus	1838	32	..
—— arvensis	1844	1	..
—— Hartwegii	1839	31	..
—— Barkeri	1839	56	..
—— bilineatus (note)	1839	56	..
—— mexicanus (note)	1839	56	..
—— leptocarpus	1840	38	..
—— ramosissimus	1845	25	..
Lycaste plana	1842	..	96
—— ——	1843	35	..
—— Barringtoniæ	1844	..	51
—— —— crinita	1844	..	41
—— aromatica var. retusa	1844	..	47
—— gigantea	1844	..	48
—— ——	1845	34	..
—— tetragona	1843	..	64
Lysimachia lobelioides	1841	..	150
—— ——	1842	6	..
—— —— spuria	1843	..	133
Macleania longiflora	1844	25	..
Macradenia mutica	1839	..	22
Mulachadenia clavata	1839	..	110
Malaxis Parthoni	1840	..	214
Malva lucida	1839	..	130
—— mauritiana	1839	..	82
Mandevilla sauveolens	1840	7	..
Manglesia glabrata	1840	..	27
Marcetia excoriata	1843	31	..
Marianthus cœruleopunctatus	1841	..	15
Marlea begonifolia	1838	61	..
Martynia fragrans	1840	..	206
—— ——	1841	6	..
Masdevallia infracta	1838	..	64
—— floribunda	1843	..	112
—— cuprea	1843	..	125
Matthiola odoratissima	1839	25	..

		pl.	misc.
Matthiola maderensis	1841	..	97
Maxillaria Colleyi	1838	..	161
—— cruenta	1842	13	..
—— Rollissonii	1838	40	..
—— galeata	1843	.	13
—— aromatica	1842	13	..
—— vitellina	1838	..	116
—— ——	1839	12	..
—— porrecta	1838	..	173
—— macrophylla	1838	..	174
—— ——	1840	..	191
—— bractescens	1842	..	92
—— concava	1844	..	12
—— corrugata	1844	..	14
—— costata	1838	..	175
—— variabilis	1838	..	92
—— Brockelhurstiana	1841	..	28
—— candida	1841	..	59
—— Harrisoniæ	1841	..	168
—— placanthera	1841	..	103
—— jugosa	1841	..	104
—— barbata	1841	..	141
—— purpurascens	1841	..	142
—— madida	1838	..	74
—— Lyonii	1845	..	26
—— Boothiana	1838	..	95
—— tenuifolia	1839	8	..
—— stapelioides	1839	17	..
—— xanthina (note)	1839	17	..
—— foveata	1839	..	2
—— acutifolia	1839	..	148
—— acutipetala	1843	..	36
—— lentiginosa	1839	..	93
—— aureofulva	1840	..	43
—— stenopetala	1840	..	43
—— setigera	1845	..	38
—— triangularis	1845	..	11
—— scabrilinguis	1844	..	66
—— cucullata	1840	12	..
—— rhombea	1840	12	..
—— Macleei	1840	..	155
—— Meleagris	1844	..	9
—— Skinneri	1840	..	101
—— ——	1840	..	145
—— ——	1842	..	13
—— rugosa	1843	..	121
Medicago clypeata	1839	..	90
Medinilla erythrophylla	1838	..	158
Megaclinium oxypterum	1839	..	10
—— Bufo	1841	..	82
Microstylis excavata	1838	..	93
—— histionantha	1840	..	214
—— caulescens	1841	1	..
Miltonia candida	1838	..	29
—— —— *var.* grandiflora	1843	..	110
—— cuneata	1844	..	28
——	1845	8	..
Mimosa marginata	1838	..	152
—— uruguensis	1842	33	..
Mina lobata	1842	..	9
—— ——	1842	24	..
Mirbelia speciosa	1841	58	..
Morina longifolia	1840	36	..
Mormodes buccinator	1840	..	9
—— buccinator, var.	1841	..	191
—— pardinum	1838	..	176
—— ——	1839	..	7
Mormodes lineatum	1841	..	107
—— ——	1842	43	..
—— luxatum	1842	..	66
—— ——	1843	33	..
—— aromaticum	1841	..	162
—— ——	1843	56	..
Morna nivea	1838	9	..
Morrenia odorata	1838	..	129
Mucuna pruriens	1838	18	..
Mycaranthes obliqua	1840	..	184
Myoporum ascendens	1844	..	50
—— serratum	1845	15	..
Nagelia denticulata	1845	..	51
Napoleona imperialis	1844	..	81
Narcissi	1843	38	..
Narcissus montanus	1844	..	35
Nelumbium Caspicum	1844	14	..
Nemaconia gracilifolia	1839	..	15
Nemesia floribunda	1838	39	..
Nepeta salviæfolia	1839	..	123
Nicotiana rotundifolia	1838	..	110
Niphæa oblonga	1841	..	172
—— ——	1842	5	..
Notylia punctata	1838	..	166
—— pubescens	1842	..	72
—— aromatica	1841	..	77
—— incurva	1838	..	167
—— Barkeri	1838	..	168
—— tenuis	1838	..	169
—— micrantha	1838	..	170
Oberonia cylindrica	1840	..	23
—— miniata	1843	..	8
—— recurva	1839	..	8
—— Wightiana	1839	..	9
Octomeria gracilis	1838	..	55
—— grandiflora	1842	..	80
—— diaphana	1839	..	145
—— tridentata	1839	..	43
Odontoglossum Bictoniense	1840	66	..
—— constrictum	1843	..	25
—— Cervantesii	1845	36	..
—— stellatum	1841	..	25
—— Ehrenbergii	1841	..	85
—— pulchellum	1841	48	..
—— Clowesii	1839	..	153
—— læve	1844	39	..
—— membranaceum	1845	..	45
—— citrosmum	1842	..	68
—— ——	1843	3	..
—— cordatum	1838	..	90
—— grande	1840	..	94
—— maculatum	1840	30	..
—— Rossii	1839	48	..
—— ——	1843	..	19
Œnothera fruticosa indica	1841	11	..
Olinia capensis	1840	..	212
—— acuminata	1841	..	135
—— cymosa	1841	..	136
Oncidium tetrapetalum	1838	..	56
—— candidum	1843	..	76
—— brachyphyllum	1842	4	..
—— confragosum	1838	..	92
—— cuneatum	1843	..	15
—— ascendens	1842	4	..
—— pulvinatum	1838	..	115
—— ——	1839	42	..
—— Porkelii	1843	..	14

		pl.	misc.
Oncidium Cebolleta	1842	4	..
—— pergameneum	1842	..	7
—— hians	1838	..	124
—— bicolor	1843	66	..
—— raniferum	1838	48	..
—— longifolium	1842	4	..
—— luridum guttatum	1839	16	..
—— Suttoni	1842	..	8
—— trulliferum	1839	57	..
—— bicallosum	1842	..	14
—— ——	1843	12	..
—— gallopavinum	1845	..	46
—— Forbesii	1839	..	149
—— ensatum	1842	..	15
—— excavatum	1839	..	150
—— sphacelatum	1842	30	..
—— sphegiferum	1843	..	23
—— spilopterum	1844	..	76
—— ——	1845	40	..
—— sanguineum	1839	..	68
—— nanum	1842	..	30
—— unicorne	1839	..	76
—— uniflorum	1843	43	..
—— urophyllum	1842	54	..
—— carinatum	1840	..	45
—— intermedium	1840	..	46
—— barbatum	1842	..	74
—— unicornutum	1840	..	47
—— Carthaginense	1840	..	215
—— pelicanum	1840	..	216
—— macrantherum	1841	..	33
—— Wrayæ	1841	..	57
—— monoceras	1841	..	160
—— Barkeri	1841	..	174
—— nebulosum	1841	..	175
—— Huntianum	1840	..	137
—— pachyphyllum	1840	..	138
—— Insleayi	1840	..	21
—— incurvum	1840	..	174
—— ——	1845	64	..
—— lacerum	1844	..	38
—— leucochilum	1840	..	79
—— ornithorhynchum	1840	10	95
—— oblongatum	1844	..	11
—— ampliatum	1840	..	97
—— microchilum	1840	..	193
—— ——	1843	23	..
—— Wentworthianum	1840	..	194
—— pallidum	1840	..	108
—— ramosum	1840	..	154
—— suave	1843	..	22
—— stramineum	1840	14	..
—— ——	1838	..	63
Ophelia purpurascens	1840	..	158
Ophrys arachnites	1845	..	81
Opoidia galbanifera	1839	..	107
Orchis sambucina	1845	..	64
Ornithidium miniatum	1845	..	65
Ornithogalum geminiflorum	1838	..	100
—— divaricatum	1841	..	111
——	1842	28	..
—— nanum	1845	39	..
—— marginatum	1845	21	..
—— montanum	1838	28	..
Osbeckia stellata, var.	1844	55	..
Oxalis Darvalliana	1840	..	11
—— Ottonis	1840	..	213
—— sensitiva	1845	..	68
Oxalis discolor	1845	..	18
—— fruticosa	1841	41	..
—— rubrocincta	1842	64	..
Oxyanthus versicolor	1840	..	150
Oxylobium capitatum	1841	..	80
—— ——	1843	16	..
—— obovatum	1843	36	49
Pæonia (Onæpia) Brownii	1839	30	..
Pachyphytum bracteosum	1845	..	32
Panætia fulva	1838	..	83
Papaver amoenum	1839	..	80
Passiflora hispidula	1840	..	3
—— ——	1840	..	16
—— onychina	1838	21	1
—— verrucifera	1840	52	105
Patersonia sapphirina	1839	60	..
Paxtonia rosea	1838	60	113
Pedicularis megalantha	1842	..	57
—— pyramidata	1841	..	155
Pentas carnea	1844	32	..
Pentlandia miniata	1839	68	..
Pentstemon barbatum carneum	1839	21	..
—— crassifolium	1838	16	..
—— gentianoides	1838	3	..
—— gentianoides, var. diaphanum	1845	16	..
Peristeria guttata	1840	..	33
—— Humboldti	1843	18	..
Peristylus goodyeroides	1843	..	187
Pernettya angustifolia	1840	63	..
Pesomeria tetragona	1838	..	6
Phacelia fimbriata	1841	..	126
Phædranassa chloracra	1845	17	..
—— ——	1845	..	23
Phaius grandifolius	1839	..	40
—— bicolor	1839	..	91
—— Wallichii	1839	..	58
—— albus	1838	33	..
Phalænopsis amabilis	1838	34	..
Pharbitis Learii	1841	56	..
—— ostrina	1842	51	..
Philadelphus hirsutus	1838	14	..
—— Gordonianus	1838	..	23
—— ——	1839	32	..
—— triflorus	1838	..	51
—— laxus	1839	39	..
—— mexicanus	1840	..	70
—— ——	1841	..	118
—— ——	1842	38	..
Philibertia grandiflora	1843	13	..
Phlomis simplex	1841	..	102
—— Cashmeriana	1844	22	..
Phlox Van Houtte's	1843	5	..
Pholidota articulata	1839	..	57
—— undulata	1841	..	19
—— conchoidea	1840	..	108
Phycella biflora	1838	..	72
—— obtusa	1844	..	93
Physinga prostrata	1838	..	45
Physosiphon carinatus	1838	..	132
Physurus pictus	1844	..	61
Picris asperrima	1838	..	108
—— barbarorum	1838	..	107
Pieris ovalifolia	1842	..	50
Pilumna laxa	1844	..	74
Pimelia incana	1838	24	..
—— crinita	1838	..	109

		pl.	misc.
Pimelia spectabilis	1841	33	18
—— prostrata	1839	..	81
Pinus oocarpa	1839	..	23
—— Llaveana	1839	.	24
—— Hartwegii	1839	..	95
—— Devoniana	1839	..	96
—— Russelliana	1839	..	97
—— macrophylla	1839	..	98
—— pseudostrobus	1839	..	99
—— apulcensis	1839	..	100
—— filifolia	1840	..	132
—— Coulteri	1840	..	133
Pisonia Olfersiana	1841	..	34
Pitcairnia undulata	1843	..	44
—— micrantha	1843	..	57
—— ringens	1845	..	14
Pittosporum bicolor	1843	..	27
Placea ornata	1841	50	..
Plagianthus Lampenii	1838	..	25
Plautia flava	1844	..	88
Pleurothallis circumplexa	1838	..	27
—— marginata	1838	..	70
—— aphthosa	1838	..	71
—— vittata	1838	..	133
—— ophiocephala	1838	..	48
—— stenopetala	1838	..	182
—— muscoidea	1838	..	165
—— pectinata	1839	..	1
—— recurva	1841	..	1
—— luteola	1841	..	2
—— picta	1841	..	182
—— gelida	1841	..	186
—— sicaria	1841	..	187
—— fragilis	1841	..	188
—— fœtens	1843	..	7
—— peduncularis	1841	..	64
—— ——	1843	..	62
—— breviflora	1841	..	125
—— strupifolia	1839	..	3
—— bicarinata	1839	..	11
—— scabripes	1839	..	155
—— pachyglossa	1840	..	146
—— seriata	1840	..	175
—— Smithiana	1843	..	79
—— villosa	1840	..	40
—— ciliata	1840	..	41
Podolepis contorta	1838	..	120
Podolobium berberifolium	1841	..	89
Pogonia plicata	1841	..	129
Polemonium cœruleum grandiflorum	1840	..	76
Polygonum amplexicaule	1838	..	117
—— ——	1839	46	..
—— molle	1841	..	66
Polystachya zeylanica	1838	..	144
—— clavata	1842	..	71
—— ramulosa	1838	..	142
—— luteola	1838	..	143
—— reflexa	1841	..	43
—— bracteosa	1840	..	102
—— cerea	1840	..	208
Ponera graminifolia	1839	..	15
—— ——	1842	..	17
—— juncifolia	1842	..	17
—— striata	1842	..	17
Populus balsamifera	1843	..	29
—— tristis	1843	..	30
—— longifolia	1843	..	31
Populus candicans	1843	..	32
—— pseudo balsamifera	1843	..	33
—— laurifolia	1843	..	34
—— suaveolens	1843	..	35
Porpax reticulata	1845	..	66
Portulaca Thellusonii	1839	..	114
—— ——	1840	31	..
—— splendens	1843	34	..
Posoqueria versicolor	1841	26	..
Potentilla insignis	1841	37	..
—— bicolor	1845	62	..
Pothos podophyllus	1841	..	176
Primula denticulata	1842	47	..
Pronaya elegans	1840	..	200
Protea longiflora	1841	..	136
Prunus Pseudocerassus	1845	..	50
Psithyrisma	1843	..	135
Psoralea obcordata	1838	..	57
—— brachytropis	1841	..	76
Puya Altensteinii	1840	..	210
—— cœrulea	1840	11	..
—— heterophylla	1840	71	..
—— recurvata	1843	..	43
Quekettia microscopica	1839	..	6
Quercus acutifolia	1840	..	160
—— reticulata	1840	..	161
—— crassipes	1840	..	162
—— spicata	1840	..	163
—— mexicana	1840	..	164
—— glaucescens	1840	..	165
—— sideroxyla	1840	..	166
—— lancifolia	1840	..	167
—— petiolaris	1840	..	168
—— mannifera	1840	..	72
—— regia	1840	..	73
—— Brantii	1840	..	74
Quisqualis sinensis	1844	15	..
Randia oxypetala	1843	..	92
Renanthera matutina	1843	41	3
Rhododendron Rollissonii	1843	25	..
—— Aprilis	1843	62	..
Rhodorhiza	1841	..	152
Rhodostoma gardenioides	1843	..	47
Rhus diversiloba	1845	38	..
Rhynchopera pedunculata	1845	..	30
Ribes Menziesii	1838	..	52
Rigidella flammea	1840	16	64
—— immaculata	1841	68	133
Rivea tiliæfolia	1841	..	29
Rodriguezia crispa	1840	54	..
—— ——	1839	..	139
—— carnea	1843	..	113
—— laxiflora	1839	..	136
—— maculata	1840	..	218
Roepera aurantiaca	1838	..	105
Roudeletia longiflora	1843	42	..
Roscöea purpurea	1840	61	..
—— lutea	1841	..	159
Saccolabium gemmatum	1838	..	88
—— densiflorum	1838	..	103
—— Blumei	1841	..	115
—— calceolare	1838	..	139
—— bifidum	1838	..	5
—— compressum	1840	..	5
—— micranthum	1839	..	52
—— ochraceum	1842	..	4
Salvia Moorcroftii	1839	..	127
—— patens	1838	23	48

		pl.	misc.
Salvia pratensis	1845	..	63
—— excelsa	1841	..	185
—— tubiformis	1841	44	40
—— ——	1845	..	17
—— confertiflora	1839	29	..
—— canescens	1838	36	..
—— hians	1840	..	115
—— ——	1841	39	..
—— prunelloides	1840	..	207
—— Regla	1840	..	205
—— ——	1841	14	..
Saponaria perfoliata	1839	..	83
Sarcanthus filiformis	1842	..	69
—— pallidus	1840	..	185
—— oxyphyllus	1840	..	123
Sarcochilus olivaceus	1839	..	27
—— parviflorus	1838	..	50
—— unguiculatus	1840	..	143
Satyrium papillosum	1838	..	154
—— carneum	1838	..	155
—— candidum	1838	..	153
—— pustulatum	1840	18	..
Saussurea pulchella	1842	18	..
Saxifraga ciliata	1843	65	..
Scaphyglottis reflexa	1839	..	21
—— stellata	1839	..	60
Scelochilus Ottonis	1842	..	23
—— ——	1845	..	19
Schizanthus candidus	1843	..	45
Schizonotus tomentosus	1840	..	156
Schomburgkia marginata	1839	..	12
—— tibicinis	1841	..	119
—— —— var. grandiflora	1845	30	..
—— undulata	1844	..	21
—— ——	1845	53	..
—— crispa	1844	23	..
Schubertia graveolens	1838	..	2
Schweiggeria pauciflora	1841	40	..
Scilla pratensis	1839	63	..
—— Peruviana, var. discolor	1843	48	..
—— pubens	1845	..	52
—— Bertolonii	1845	..	53
—— pumila	1845	..	54
Scleroon oleinum	1843	..	98
Scutellaria splendens	1841	..	139
Sedum miserum	1838	..	122
—— multicaule	1840	..	124
Selago distans	1845	46	..
Senecio populifolius, lacteus	1839	45	..
—— cruentus	1839	7	..
—— odoratus	1839	..	111
Serapias cordigera	1845	..	80
Severinia brevifolia	1841	..	52
Sieversia elata	1842	..	54
Sisyrinchium junceum	1840	..	12
—— majale	1841	..	37
Sobralia macrantha	1842	..	65
—— sessilis	1841	17	11
Solanum betaceum	1840	..	65
—— ——	1840	..	61
—— candidum	1839	..	125
—— concavum	1842	..	60
—— macrantherum	1840	..	181
—— ——	1841	7	..
—— Rossii	1840	..	34
—— uncinellum	1840	15	..

		pl.	misc.
Solanum vernicatum	1838	..	137
Sollya linearis	1839	..	132
—— ——	1840	3	..
Sophronitis violacea	1840	..	18
Sowerbæa laxiflora	1841	10	..
Spathoglottis plicata	1844	..	58
—— Fortuni	1845	19	..
Specklinia orbicularis	1838	..	41
—— ciliaris	1838	..	40
—— obovata	1839	..	137
Sphærolobium acuminatum	1843	..	77
Sphærotele coccinea	1845	..	22
Spiræa barbata	1838	..	65
—— fissa	1842	..	1
—— Kamschatica	1841	4	..
—— lanceolata	1841	..	93
—— cuneifolia	1839	..	87
—— Lindleyana	1845	33	..
—— vacciniifolia	1839	..	88
—— ——	1840	17	..
—— Reevesiana	1844	10	..
—— rotundifolia	1840	..	159
—— laxiflora	1839	..	89
—— fissa	1840	..	170
Spiranthes cerina	1842	..	19
—— diaphana	1844	..	20
—— diuretica	1838	..	119
—— Lindleyana	1841	..	38
—— lobata	1844	..	17
—— ——	1845	..	43
—— rosulata	1843	..	84
Spironema fragrans	1840	47	48
Sprekelia cybister	1840	33	..
—— glauca	1840	..	104
—— ——	1831	16	..
Stanhopea inodora	1845	65	..
—— quadricornis	1838	5	..
—— Bucephalus	1845	24	..
—— Lindleyi	1838	..	4
—— aurea	1841	..	31
—— tigrina	1839	1	..
—— oculata	1839	.	113
—— ——	1840	..	80
—— graveolens	1840	..	125
—— guttulata	1843	..	116
—— maculosa	1840	..	28
—— Martiana	1840	..	109
—— ——	1841	..	147
—— —— var. bicolor	1843	44	8
—— Wardii	1840	..	147
Statice arborea	1839	6	..
—— Fortuni	1845	63	..
—— pectinata	1840	65	..
—— monopetala	1841	54	..
—— —— var. denudata	1842	59	..
—— macrophylla	1845	7	..
Stelis argentata	1842	..	78
—— crassifolia	1842	..	12
—— atropurpurea	1842	..	100
—— tristyla	1838	..	69
Stenia pallida	1838	20	..
Stenochilus longifolius	1839	..	115
—— incanus	1839	..	116
Stenomesson eustephioides	1843	..	91
—— Hartwegii	1844	42	..
—— vitellinum	1843	2	..
—— aurantiacum	1843	..	90
—— ——	1844	..	26

		pl.	misc.
Stenocoryne longicornis	1843	..	68
Stevia fascicularis	1838	59	..
Stigmaphyllon ciliatum	1841	..	121
——— jatrophæfolium	1843	..	80
——— ———	1844	7	..
Strobilanthes scabra	1841	32	..
Strobilorhachis glabra	1845	..	35
Stylidium proliferum	1841	..	78
——— pilosum	1841	..	79
——— ———	1842	41	..
——— Brunonianum	1841	..	95
——— ———	1842	15	..
Syringa Emodi	1845	6	..
Tabernæmontana dichotoma	1841	53	..
Talinum teretifolium.	1843	1	..
Tanacetum longifolium	1840	..	78
Tasmannia aromatica	1845	43	..
Tetranema mexicanum	1843	52	..
Thalictrum cultratum	1840	..	77
Thomasia canescens	1840	..	203
Thuja filiformis	1842	20	..
Thysanotus intricatus	1838	..	111
Tigridia violacea	1841	..	134
——— lutea	1845	..	24
——— ———	1840	4	..
——— tenuis	1838	50	..
——— proliferus	1838	8	..
——— isantherus	1839	..	75
Tillandsia Gardneri	1842	63	..
——— rubida	1842	63	..
——— vitellina	1845	..	20
Tradescantia iridescens	1840	34	160
——— tumida	1840	42	..
Tremandra Hugelii	1844	67	..
Trichinium alopecuroideum	1839	28	..
——— Manglesii(note)	1839	28	..
——— Stirlingii (note)	1839	28	..
Trichocentron iridifolium	1838	..	178
——— recurvum	1843	..	17
——— candidum	1843	..	18
Trichonema edule	1842	..	99
Trichosma suavis	1842	21	..
Trifolium involucratum	1840	..	116
Trigonidium acuminatum	1838	..	136
——— Egertonianum	1838	..	135
——— ———	1840	..	100
——— ringens	1840	..	121

		pl.	misc.
Trigonidium tenue	1839	..	134
Trimezia meridensis	1844	..	85
Triptilion spinosum	1840	..	129
——— ———	1841	22	..
Triteleia aurea	1841	..	161
Tritonia fucata	1838	35	..
Trochetia grandiflora	1844	..	10
——— ———	1844	21	..
Trollius acaulis	1842	..	56
——— ———	1843	32	..
Tropæolum azureum	1842	65	..
Trymalium odoratissimum	1838	..	30
Tulipa Gesneriana	1838	46	..
——— humilis	1844	..	39
——— malcolens	1839	66	..
Turræa lobata	1843	..	86
——— ———	1844	4	..
Urceolina pendula	1838	..	151
Valeriana Napus	1840	..	180
Van Houtte's Phlox	1843	5	..
Vanilla bicolor	1838	..	58
——— Palmarum	1842	..	75
Vanda congesta	1839	..	94
——— cristata	1842	48	..
——— teres	1842	..	25
——— furva	1844	..	42
——— parviflora	1844	..	57
——— violacea	1841	..	32
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